

The Digital Space in the English Classroom

**A study of the use of digital tools in the teaching of EFL in the Norwegian
Upper Secondary School**



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“It is better to be a master of a few things than a Jack of all Trades!”

Female teacher, 50 years old.

Acknowledgements

My work with this thesis has now ended, and it has been both interesting and challenging. At times, more of the latter. Now when the product is finished, it all seems worth it though. Five years of studying, having exams and carrying out my research has come to an end. I am grateful that I have had the opportunity to do this, and I appreciate all the fellow students I have gotten to know, as well as the lecturers at the University of Bergen. Looking back at it all, several people need to be thanked. Without all of them the finished product would not have been as it is, and the road to finishing it, would have been harder.

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Abstract in Norwegian

Denne studien har som mål å seie noko om forskjellen mellom engelsklærarne i den vidaregåande skulen når det gjeld digitale ferdigheiter og bruken av digitale verktøy. Den vil også sjå på forskjellane mellom fylka som skuleeigar når det gjeld å gje lærarane opplæring i bruken av digitale verktøy, i tillegg til å sjå på kva forventningar skuleeigar stiller til sine lærarar når det gjeld bruken av digitale verktøy i undervisninga. Med tanke på at dagens læreplanverk framhevar digitale ferdigheiter som ein av fem grunnleggande ferdigheiter i norsk skule, burde ein forvente at elevane møter lærarar som er trygge nok i bruken av digitale verktøy til å kunne la det vere eit pedagogisk verktøy elevane kan bruke i innlæringa av engelsk. I staden møter mange elevar lærarar som har ein langt lågare digital kompetanse enn dei sjølve, i tillegg til at dei gjerne må bruke digitale verktøy som ikkje lenger er moderne. Dette heng saman med fylka sin økonomi, og skulane sine prioriteringar. Studien viser at ein finn forskjellar frå skule til skule, også innan fylka. Det eksisterer ikkje noko felles, overordna praksis som gjer at alle elevar får engelskopplæring på same vilkår når det gjeld bruken av digitale verktøy. Ikkje ein gong elevar innan same fylke får den same opplæringa. I alt for stor grad er den digitale opplæringa av lærarane opp til dei sjølve, eller til meir digitalt kompetente kollegaer. Alle elevar skal fylle dei same krava stilt i ein nasjonal læreplan, og dei skal nå dei måla med hjelp av ein lærarstand der det ikkje vert stilt noko nasjonale eller fylkeskommunale krav i det heile.

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List of Abbreviations

In the field of **ICT** (Informations and Communications Technology) there are quite a few expressions and concepts that are important. Many of these are used in this study, and here I aim to clarify some of them.

LMS. LMS is short for Learning Management Systems. The systems may also be referred to as digital learning platforms, or just learning platforms. These systems will be dealt with in section 2.9.

EFL. EFL is an acronym for English as a Foreign Language.

NDLA. National Digital Learning Arena. (Nasjonal Digital Læringsarena). NDLA's vision is to be a platform where teachers and pupils in upper secondary school can make use of good, open digital resources. NDLA is a cooperation between all the Norwegian counties except Oslo. (<http://om.ndla.no/rapporter>)

LK06. National Curriculum for Knowledge Promotion introduced 2006

R94. National Curriculum Reform94 for upper secondary from 1994-2006

SCT. Sociocultural Theory

ZDP. Zone of Proximal Development

PC. PC is an abbreviation for personal computer. Through the thesis, the concept PC is used, together with Laptop (a PC that is portable, and can be held on one's lap), or just computer.

L1 First language/mother tongue

IT Information Technology

EDB Norwegian abbreviation for *Elektronisk Databehandling* (Automatic Processing)

PDC Professional Digital Competence

OECD Organisation for Economic Co-operation and Development

DeSeCo Definition of Selected Competencies

PISA Programme for International Student Assessment

Chapter 1: Introduction

1.1 Background

I have been working as an English-teacher in upper secondary for just over a decade. I started working six months before the introduction of the Knowledge Promotion (LK06) in 2006. I had a brief encounter with the R94 curriculum, before the introduction of LK06. My co-workers who had used the R94 curriculum for many years, found that the transmission was harder, as the new curriculum also introduced five basic skills, where digital skills was supposed to be on par with other basic skills like speaking, writing, reading and numeracy. Reading and writing is a natural part of all subjects, and including numeracy was not, in my opinion, seen as a problem. All teachers know basic ways of numeracy, and would have no problem implementing it into their subject. That was not the case with digital tools. Digital tools was something new, and not all teachers had the necessary digital competence to implement this successfully into their subject. Digital competence is not something one has, but something that will need to be acquired (Hølleland, 2007). This acquisition of knowledge takes longer with some teachers than others, and it seems to me that not all teachers are interested in increasing their ICT knowledge. According to Hildegunn Otnes (2009) those who are interested in ICT, learn more, and see the use of digital tools in the classroom. Because of the introduction of the LK06, and the PC-scheme¹, all Norwegian pupils in upper secondary now had a PC in front of them in class. For most, the work as a teacher changed drastically. From teaching using the textbook, self-made overhead sheets and not having to deal with too many distractions in the classroom, the situation changed. Pupils had a PC. They were connected to the internet. They had access to an extreme amount of information they were not trained to deal with, both relevant and not so relevant. They had phones, later smartphones, iPads, and iPods. These devices that took attention away from what was going on in the front of the classroom, away from the textbook, away from the teacher and the co-pupils. Times had definitely changed. Now, ten years later, we can see it has changed the way we teach English, as well as how pupils learn English. As Hauge and Lund (2012) states, ICT has increased the complexity in school. A valid question is if the teachers have been able to follow the development on par with the pupils' level of competence, and if there is a

¹ The term PC-scheme is frequently used in the thesis, as well as in the interviews. The PC scheme refers to the introduction of pupil PCs in the Norwegian upper secondary school, gradually starting in 2007. The Norwegian Education Act states that upper secondary education is supposed to be free, and that it is up to the school owner to provide both printed and digital resources and equipment (see section 2.2).

correlation between the expectations the school-owners have to its teachers when it comes to digital tools and competence, and the training they offer. In my opinion, many teachers would say there is not.

In my work as a teacher, more specifically an English teacher, ICT is a big part of my every day. I do not consider myself a super-user of some sort, but probably have the expected knowledge of a teacher my age. By that I mean, and this is my impression, that I as a teacher just above 40, use computers and digital tools more in my private life than those of my colleagues that are ten-twenty years my senior. This is of course very individual, but from my experience, it is a valid assumption when it comes to my school. All my pupils in English have their own personal laptops that they are expected to bring to every class. Therefore, ICT is a big part of a pupil's every day as well. As most of my pupils² are well more than twenty years my junior, they have the advantage of using ICT and digital tools more than me in their spare time, making some of them quite superior when it comes to using computer programs, different applications, social networks and various tools. As will be discussed at a later point in this thesis, the pupils are part of a generation that has grown up using these tools. They have just acquired the necessary skills, not having had to learn them through various courses and classes like those belonging to the generations above. These generations are called digital natives and digital immigrants (see section 2.8.4).

A thing that has struck me several times is the difference I notice when it comes to EFL teachers' use of digital tools. Though we are all to fulfil the aims in the exact same curriculum, some teachers tend to be more careful using the more modern digital tools. They seem reluctant to acquire the necessary knowledge needed to use ICT in an appropriate way to meet the aims in the curriculum. An example from my school is that though we have the latest, most modern smart-boards and computers in every classroom, where you can play CDs and audio files from the PC's hard drive or from the internet, some teachers still swear to bring a portable CD player. They are more familiar and comfortable with this type of device. Considering this, the digital competence of the pupils when graduating from upper secondary, can be said to vary depending on the teacher they had. This is something that is important to consider in the debate about how we best can implement digital tools in the Norwegian school. Another natural question is of course if some overdo the use of digital tools. When I

² In my study I have aimed to use the concept pupil/pupils when referring to learners of English in upper secondary (and lower if that has been necessary). I have used student/students when referring to learners at the university or university college level. The respondents may have used the term student where I would have used pupil, so when using quotes from the interviews, there may be an inconsistency in my use of the terms.

recently had my pupil-teacher conversation with my pupils, some said they had problems gaining knowledge in those subjects where the teacher had a big focus on teaching using digital tools, and the book was almost never, or not used at all. They felt insecure as to how they were to prepare for tests, and they said they missed taking notes by hand in their notebook and actually reading in their textbook. This response from the pupils can be an indication that there is such a thing as too much, and that it is still important to vary our use of digital, and non-digital tools when teaching.

1.2 Relevance

In the year of 2016, in the Norwegian upper secondary school, digital tools and skills have never been more debated and important. There are clear expectations as to the development of digital competence, and the tools are now available for the teachers to fulfil the aims of the national curriculum. The gap between the digital knowledge of the teachers and that of the pupils is distinct, and many teachers feel inadequate when trying to use digital tools so that it benefits the learning of the pupils. Youngsters today are born into a generation of laptops, iPads, videogames and smartphones, and when starting upper secondary at the age of 16, they are already proficient users of most digital tools. In the English classroom the pupils may meet a teacher who is not at all confident using these tools when teaching, and will not be able to follow the pupils in their use of internet in class. For these teachers the PC, the internet and digital tools have not been a welcome development, but a new, more modern way to take the pupils' attention away from what is going on in the front of the classroom. The digital competence of pupils in EFL may also depend on the digital competence, and interest of the teacher they have had. Some pupils may have had three years of English in upper secondary, never using their PC for anything else than writing assignments, and searching for information online. Others may have had a teacher who has taken interest in digital tools, and their pupils have been exposed to new ways of learning because of the possibilities digital tools bring with it.

Not very much has been written on this subject in Norway, though it is an expanding field of literature. Andreas Lund, Professor at the University of Oslo wrote his Ph.d on teachers in ICT-rich environments in 2003. This is the only Ph.d written on this subject in Norway (Otnes 2009). As the development within ICT is so rapid, a lot of what Lund presents in his Ph.d can

be said to be outdated. The present study will present more modern tools that were not present when Lund did his study.

Thomas Arnesen handed in his Master's thesis at the University of Oslo in 2010, with the title *The role of ICT in the teaching of English as a Foreign Language in Norwegian Lower secondary schools – a study of ICT use and patterns of associated factors*. Arnesen's thesis is of course interesting for this study. It will not apply for the teachers I seek to find information about though, the teachers on the upper secondary level. The lower secondary is run by the municipalities, while the upper secondary schools are run by the counties³. In addition, Arnesen's study has a quantitative design, where this study is qualitative.

My aim is that my study will fill the necessary literary gap there is in time between my present study and Lund's Ph.d, and the different levels that Arnesen's and my thesis deal with.

1.3 Research Questions and Hypotheses

Because of the backdrop, and the aim and scope, my research question is as follows:

How do teachers' use of digital tools vary according to age, sex and geographical affiliation?

Through the study I want to find out if there are differences in certain areas between the sexes, age groups and considering which county the respondents work in.

Connected to the research question I have developed three hypotheses:

- There is a big difference when it comes to the digital competence of English-teachers.
- There is a great variety when it comes to which, and how, digital tools are being used.
- There is a variety between the different counties (school owners) as to what they provide of training, and what expectations they have to the teachers' use of digital tools.

1.4 Organisation of the thesis

The thesis consists of five chapters. The first chapter, being the introduction, presents the research question and hypotheses together with the background and relevance of the thesis. Chapter 2 presents the theoretical framework, including a section on previous research,

³ In the thesis the county municipalities are referred to as just *counties*.

followed by chapter 3 which deals with methodology and material. The results and findings are presented, and discussed, in chapter 4, before the concluding remarks are given in the last chapter, chapter 5.

Chapter 2: Theoretical Background

2.1 Introduction

In this chapter the theory around the subject of the thesis is presented. Technology and ICT play an important role in today's society, and there is a constant change and development when it comes to digital tools and expectations concerning digital competence. This shift contributes to change our habits and practices in school, as well as our need for competence. As teachers, we are supposed to make the pupils ready for a society where it is expected that they contribute actively. We have to prepare them for the rapidly changing community of which they will become a participant. As teachers we have to use the digital space to make sure that the pupils learn as much as possible, and that they make strategies for acquiring knowledge and competence, not just in our subject, but also in the ICT area. This is the reason why the study does not only look at the teachers' digital competence, but also the pupils', as the LK06 requirements apply for the pupils, not the teachers. Further, it is the teacher's responsibility to help the pupils reach the goals in the curriculum.

The chapter is based on the current situation concerning the national curriculum and governmental regulations, but also looks back at previous practices, and previous research on the topic. The aims and targets of both the government and the curriculum are included, followed by theory on digital competence.

2.2 Legislative perspective

The 2006 Knowledge Promotion Curriculum (LK06) is the first Norwegian curriculum to list digital competence as one of the basic skills, on par with the basic skills literacy, writing, oral proficiency and numeracy (Aagaard and Lund, 2013). To follow up; the PC-scheme was introduced in Norwegian upper secondary schools gradually from 2007. In 2007 all students at the vg1 level started using their own PC, and after three years all Norwegian students in upper secondary had their own personal PC to use in class. In the Norwegian Education Act § 3-1, the following is said about free educational resources in upper secondary school:

Education in public upper secondary schools (...) is free. The county has the responsibility for keeping the students with the necessary printed and digital resources as well as digital equipment. (The Norwegian Education Act § 3-1). This reform initiated development of

educational infrastructures (Aagaard and Lund, 2013), resulting in the modern upper secondary school we have in Norway today.

The Norwegian Directorate of Education and Training published the Framework for Basic Skills in 2012. This document was created as a tool for those who develop, and revise, the subject curricula. The framework defines the basic skills, and describes their functions. The framework provides grids, where the requirements for the different levels are given. The framework states that digital skills consist of *being able to use digital tools, media and resources efficiently and responsibly, to solve practical tasks, find and process information, design digital products and communicate content* (Norwegian Directorate for Education and Training, 2012). The teacher will have to oversee the process, and must aim to make the pupil a responsible user of digital tools. The document emphasises the importance of digital skills for further learning, and for participation in society, and that using digital skills is important both in subjects, and across subjects. (Norwegian Directorate for Education and Training, 2012). As the directorate has implemented digital skills as one of the basic skills, it is evident that the idea is that the pupils need to have a basic of digital skills to be able to fulfil the competence aims in the subject curricula. A basic skill is, according to the framework; skills that are *fundamental to learning in all subjects as well as a prerequisite for the pupil to show his/her competence and qualifications* (2012). Other features that need to be present are teachers that actually possess these skills themselves, and of course the right tools to help develop the required digital skills.

2.3 Historical perspective

The use of computers in Norwegian schools dates back to the 1980s. Back in that time, it was only the most enthusiastic teachers who made use of the PC in the classroom. The use of the computer was quite different from the use we know today. In this time of pioneering, the users of computers needed knowledge about programing, which had the consequence that only a few number of teachers found it interesting. (Erstad, 2005).

In the late part of the 1980s, the Norwegian Directorate of Education and Training (Church, education and research today) was optimistic in their belief that computers would be a part of the educational system. The political rhetoric on the subject was characterised by positioning in the knowledge society, and the public debate was characterised by the expectations of the ICT raising the level of quality in the Norwegian educational system. (Erstad and Hauge,

2011). Programs for use in school were developed, but the project stranded in the early 90s, and large amounts of money had been spent without reaching any goals. This technological optimism can be compared to that of the American school in the same period. This is explained in the book *Oversold and underused* by Larry Cuban, an apt title for what we experienced in Norway at the same time (Hauge and Lund, 2012). The consequence in Norway was that the use of ICT (EDB at the time) was toned down. In Norway, among politicians, there was a fear of again committing to computers in school, as the consequences by failing had been felt. The Norwegian development differed from the situation in other Nordic countries like Sweden, Finland and Denmark, where big investments in technology in education were made.

In the 90s, a strategy for IT (ICT today) in Norwegian education was developed, and the aim was that all pupils should be familiar with using a keyboard as well as simple word processing when graduating from lower secondary school. A national action plan was developed that would be valid from 1996-1999. Since then, the Norwegian priority areas have been regulated in four-year action plans. (Erstad, 2005).

The 1996-99 action plan showed sign of a common development, and a framework for Information IT in Norwegian education. Five main areas were introduced, and the action plan focused on technology. The process of developing digital teaching aids started, and there was a special focus towards making girls interested. Another important event in this period was the establishment of the Research- and Competence-network for IT in education (ITU).

The aim of ITU was, and still is, to maintain national research- and development tasks. (Erstad, 2005). The period was characterized by school-based research projects with varying outcomes. There was obviously a need for better coordination of the area IT in education. An interesting observation from this period was the introduction of the subject “IT and economy” at the upper secondary level. IT had now been introduced as part of a school subject.

The action plan for 2000-2003 had a stronger focus on the pedagogical perspective. A positive development in technological equipment in the Norwegian school was noticed, compared to other countries. The focus was now on the pedagogical staff’s use of ICT as a work tool. A series of projects were launched, like PILOT (Project: Innovation in Learning, Organisation and Technology) and PLUTO (Program for Teacher Education, Technology and Realignment) to mention a couple. To increase teachers’ competence was a consistent theme throughout the period. Some of the results gained in this period received international

attention, especially the development of digital teaching resources, as well as the overall investment schools and other educational institutions needed to take into account by pedagogical use of ICT. (Erstad, 2005). Still, the big changes in teaching forms that were expected after the projects did not occur. There is evidence that there in the field of ICT is a long way from the political ideas in the directorate to the everyday practice in the schools. The development has been slower than originally planned. (Hauge and Lund, 2012). On the positive side, many Norwegian schools have the last 15 years gained experience and competence in the ICT area. By using internet-based resources when teaching, they have increased their level of competence. In these schools, as in the Norwegian educational system overall, the development is not characterised by giant leaps, but rather small steps. (Hauge and Lund, 2012).

The action plan for 2004-2008 focused on digital competence. As noted, the LK06 implemented digital competence as a basic skill, and it was obvious that this competence was to be a concept for the future in the Norwegian educational system. (Erstad, 2005). Though it has taken longer than planned, and cost more than wanted, it is a fact that the most common tool for writing today, among both teachers and pupils, is the computer. Writing is today a screen-based activity. Looking back 15-20 years, that was not the case. Teachers have had the ability to take classes, courses and education in the field of ICT, so that they better could cope with the entrance of computers into their classrooms. There will always be a difference in how teachers use digital tools and ICT. There is evidence that the subjects Norwegian language, Maths and English language use ICT more than other subjects, and we know that ICT is more frequently used in upper secondary, compared to the lower educational level. The introduction of laptops to pupils in upper secondary schools is of course one of the reasons. (Hauge and Lund, 2012).

When looking back at the last decade and a half, the introduction of digital media is one of the most interesting factors when it comes to school development in Norway. In this period digital media was the most innovative change in education, but also it introduced an entire new way of communication, gathering information as well as cooperation. Not only for students and teachers, but also in school management and leadership. The digital media created entirely new terms for the school as an organisation as well as its activities. ICT has increased the level of complexity in education. (Erstad and Hauge, 2011). ICT has made the school a more modern and up-to-date organisation which the students today can relate to. A group where many feel left out though, is the teachers. The teachers do not have a digital

background when entering the classroom, like the pupils do. The pupils today are born into a world where they are exposed to digital tools from a very early age. One can almost compare it to L1 acquisition. The digital competence just comes natural to them, as they acquire the competence through using digital tools from a very early age. Many of the teachers have had to learn everything as something new that entered their profession.

2.4 A sociocultural approach to Digital Competence

The creation of the digital space in the Norwegian classrooms has definitely changed the way the English language is taught and learnt. Today the learning processes have to be understood in a different way than earlier, both when it comes to how one learns as an individual, as well as collectively. Therefore, the theoretical framework has also undergone some important changes, to best suit the way we teach, and learn, in the 21st century, the digital era. The once so strong positioned behaviourism and cognitivism are not important in the field of education and ICT, as the sociocultural approaches to learning (SCT) are better suited for the research carried out when it comes to teaching and digital tools. In the behaviourist theories, which had its era in the mid-20th century, learning was viewed as a process dependent on stimulus and response. Half a decade later, the cognitive perspective on learning focused on thinking, cognition and awareness. The *mind* was what was most central in cognitive thinking. The sociocultural perspectives, which through the last 25 years has consolidated its position as the more modern perspective on learning, determine that learning is a social process, where participation through practical or academic communities is considered a necessity (Hauge, Lund and Vestøl (2007). Still, electronic grammar exercises, today used by many teachers in their teaching of English, are often based on behaviourism. When learning occurs using digital tools, a social transformation takes place and new learning conditions are created through the development within the field of ICT. (Ludvigsen et al., 2011). Digital tools, together with other physical cultural constructed objects, imbue people with more ability than natural endowments. These tools allow us to transform our worlds and lives in ways that would not have been possible had those tools not been used (Lantof and Thorne, 2007). Humans understand the world by using tools or artefacts (Hauge, Lund and Vestøl, 2007).

Mediation is an important concept in the sociocultural perspective. Mediation is also one of the things that mostly differentiates the SCT from other theoretical traditions. The main idea

about mediation is that essential tools mediate reality for people in specific activities. (Säljö, 2001). Both physical and intellectual tools are used to accomplish learning.

2.4.1 The Zone of Proximal Development

Learning is, as noted, an activity that is socially organized, and Vygotsky's thoughts and mind work are the true significance of SCT. Through Vygotsky, we have been taught that the zone of proximal development (ZPD) is central in sociocultural thinking (Vygotsky, 1978). ...*the difference between the child's developmental level as determined by independent problem solving and the higher level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers* (1978:85). In other words; the ZPD can be defined as the level where the learner can solve tasks unaided, and the level where he/she is not able to solve the tasks at all. It is built on the idea that higher mental functions, e.g. thinking, are connected to the social contexts we are in, and that our psychological processes are affected. (Ludvigsen et al, 2011). A given task cannot be too easy, or too difficult, if one wants the learner to have a positive learning experience. This is further supported by Lantolf and Thorne: *SCT argues that while human neurobiology is a necessary condition for higher order thinking, the most important forms of human cognitive activity develop through interaction within these social and material environments*" (2007:197). According to Säljö, the zone of proximal development is where the learner is most responsive to receiving support. Säljö also states that learners can appropriate new knowledge through social learning situations (2007). In other words, knowledge that somebody already holds can become new knowledge for somebody else, after participating in a social learning activity.

The ZPD is also connected to activities or an activity area. (Jarvis, in Ludvigsen et al, 2011). The importance of activity is also emphasized in Hauge, Lund and Vestøl (2007), especially how activities are constituted through social interaction, as well as the use of cultural tools, or artefacts. The ZPD is seen as a phenomenon related to a set pedagogical activity. In the interaction between the participants, a potential for learning will be created. When it comes to learning using digital tools as instruments, fellow pupils can be just as important as a teacher when it comes to guidance and helping others reach their ZPD.

A teacher of EFL, may very well have a lower level of understanding when it comes to digital tools than some of his/her pupils (see section 2.8.4 about Digital Natives and Digital Immigrants), therefore when talking about the ZPD and digital tools, it may well be pupils

helping each other develop and reach new goals. This is supported by Hauge, Lund and Vestøl (2007) when they make a note that the role of the teacher, or the ‘guide on the side’ falls short when it comes to the rapid changes in ICT and the expectations of them as an important participant, and facilitator in learning activities.

2.5 The Information and the Knowledge societies

More than ever it can be said that we live in an information society. The concept dates back to the late 1960s, when the Japanese Kohyama first used this metaphor. In the 90s a new linguistic metaphor emerged with the introduction of the concept ‘knowledge society’. *While the information society metaphor was associated with an ‘explosion’ of information and information systems, the knowledge society metaphor primarily referred to economic systems where ideas of knowledge functioned as commodities* (Anderson, 2008:5). Still today it is difficult to separate the concepts information and knowledge, but the tendency today is that information has to do with structured, formatted data, whereas knowledge concerns the cognitive state used to process information (Anderson, 2008). Yet another concept is that of the media society. By Media here means digital media.

2.6 Previous Research

This section will focus on previous research in Norway, concerning the Norwegian educational system as that is what is relevant to this study. As referred to in a previous section, relatively little research has been carried out on this topic in Norway. The amount has increased though, as the use of ICT has expanded, and the expectations to both teachers and pupils’ use of digital tools and media become higher. There are studies available, and in this chapter I will look into some of them.

Andreas Lund published his Ph.D *The Teacher as Interface. Teachers of EFL in ICT-rich Environments: Beliefs, Practices, Appropriation* in 2003. In the world of ICT, 13 years is an ocean of time, and the development seems to increase more rapidly every year. In this field of study, the life span of literature is shorter than in many other areas. There is though, more literature today, as the amount seems to adjust according to the development within ICT. Still, the challenge of being a teacher in ICT-rich environments may be just as great today as thirteen years ago, as there is always something new being developed, something new one needs to start using as a teacher. When talking about ICT and school development, expansive

learning is an important concept. This concept, introduced by the Finnish professor Yrjö Engeström in 1987, can better make us understand the complex processes when it comes to school development and the use of digital tools and media (Erstad and Hauge, 2011).

Expansive learning is when the learners are part of *constructing and implementing a radically new, wider and more complex object and concept for their activity* (Engeström and Sannino in Erstad and Hauge 2011). In other words, pupils learn something that is not there yet. They construct new objects and concepts for their new collective activity. These concepts and objects are then implemented into practice (Engeström and Sannino in Erstad and Hauge 2011).

Lund's background for carrying out his study was that he after working 20 years as a teacher, where he had used digital technologies for 15 of them, wanted to find out how the technology affected teaching and learning. His aim was to look at teachers' attitudes and practices when it came to the use of ICT, and being in ICT-rich environments, which is similar to the aim of this study. Lund's main question was *In what ways are ICTs appropriated in the EFL classroom?* (Lund, 2003). In this question, other elements of teachers' practices when it came to the use of ICT in school were implemented. Teachers' beliefs and attitudes are important parts of the research, as well as the practices that emerged when ICT was integrated in a teacher's classroom. Lund observed three teachers in their classrooms, looking at their appropriation processes regarding the subject they taught, the technologies they sought to integrate, and the didactics they employed (Lund, 2003). Lund's Ph.D. is predominantly qualitative, with quantitative aspects, making it a mixed method approach.

In Lund's closing remarks he says: *Future-oriented practices will largely have to be developed by this generation of teachers. To do so they will need support from decision makers and researchers alike* (2003). In such a rapidly changing field as ICT, this was probably a too difficult task for the teachers. As ICT and digital tools develop all the time, many tools can have a short life span. As we know, the work of a teacher contains so many tasks, and it seems that Norwegian teachers have not managed to implement digital tools into their subjects, as hoped (Hauge, Lund and Vestøl, 2007).

In the study of Thomas Arnesen (2010), which is more up to date, we learn of the role of ICT in the teaching of English in lower secondary schools in Norway. Arnesen's study, which is a Master's Thesis, sought to provide answers to the questions of characteristics of ICT-use in EFL classrooms, as well as teachers' attitudes and knowledge about new technologies.

Further Arnesen's study looked into teachers' thoughts around the usefulness of technology. Arnesen's study is 7 years younger than that of Andreas Lund, but it focuses only on the lower secondary level, whereas this study focuses on teachers in upper secondary school. In addition, Arnesen carried out a quantitative research, seeking his answers through questionnaires, using statistical techniques finding the answers to the study's research questions. Arnesen's study concluded, ...*the massive political and economic investments in ICT in education have so far not paid off* (Arnesen, 2010:105). He points out that Norway has not come as far as those we can compare ourselves with internationally, explaining that Norwegian pupils have lower skills and knowledge when it comes to ICT. In addition, ICT is only integrated to a limited extent. An interesting question is why Norwegian pupils have lower skills. According to Hauge, Lund and Vestøl, Norwegian teachers have not succeeded in implementing ICT in their subjects within the frameworks of curricula and exam plans (2007).

Centre for ICT in education publishes, and carries out, different studies that have to do with ICT in the Norwegian educational system. Their reports, called *Monitor*, was published for the first time in 2003. After that, they have carried out mainly quantitative studies, supplemented with qualitative studies to get deeper insight into some of their researches. (Egeberg et al, 2012). In their studies, their participants have been pupils from level 7 and 9 from the lower secondary level, and pupils from the vg2 level in upper secondary school.

Monitor 2011 has some interesting findings. It shows that many of the schools have strategic plans for ICT, and that school leaders see that they have a responsibility when it comes to helping teachers use ICT in teaching. It also shows that a high number of the leaders demand that their employees use ICT when teaching. When it comes to the school owners (the municipalities for the 7th and 9th level, and the counties for the vg2 level), they function as a facilitator for development of ICT in school. The teachers think they have acceptable access to computers, but are critical to the use of internet in class. The study shows that teachers use more time on the computer preparing for class, than actually using it in class. According to the study, English is one of three subjects where ICT is used most in teaching, something that is especially interesting for this thesis. Another interesting finding is that teachers see a lack of support when it comes to their understanding of how to implement ICT in their teaching. Where the teachers find the quality of their computers in school to be of good quality, the pupils find theirs not to be good enough to do the tasks expected of them. This may be a result

of the pupils being bigger consumers of computers and ICT in their spare time, thus having higher expectations to the digital tools provided for them. (Egeberg et.al 2012).

Monitor 2013 holds the title: *About digital competence and experiences with the use of ICT in school*. In this study, results of a survey about digital competence, motivation and learning environment and motivation are presented. In this quantitative study their selection has consisted of leaders, teachers as well as pupils from different schools in Norway.

Unfortunately even fewer schools than earlier participated, something which weakens the validity of the study. Therefore, results have to be read along with other studies in the field.

Monitor 2013 is an extensive report. When it comes to the teachers in the study, which is what is relevant for the present study, the focus is on what the curriculum expects of teachers' competence within the field of ICT. The results show that there is a difference between teachers' self-gained knowledge as well as tested digital competence. This means that teachers do not have the same competence, or the knowledge necessary, to use digital tools according to the expectations of the framework and the goals in the curriculum.

Though many teachers are positive to the use of ICT, they recognise the challenges that can occur concerning noise and using the internet for things not intended by the teacher. Strategies for how ICT is to be used in teaching are important. As in *Monitor 2011*, this report also shows that teachers use ICT more when planning their classes, than in actual teaching situations. Teachers do see a lack of training, as most report that it is their own unsystematic 'trying and failing' that give them most knowledge about ICT. This might indicate that the schools, and the school owners, still have a way to go when it comes to giving teachers the proper training so that they can feel confident teaching with help of digital tools and ICT as is expected in the framework and current curricula (Hatlevik et.al.2013).

Hetland and Solum have carried out a study called *Digital Competence in Norwegian Teacher Training* (Digital kompetanse i norsk lærerutdanning). The aim of the study was to get an overview of how digital competence was implemented in Norwegian teacher training. Though the study had a focus on the general teacher training, which trains teachers mainly for the lower levels than upper secondary, the study has transfer value for the upper secondary level as well. The study had three main research questions. One was the status for the implementation of digital competence in teacher training. The second was what strategies the education institutions followed when focusing on digital competence. The third research question was related to challenges of developing digital competence in teacher training

(Hetland and Solum (2008). The study's report concluded that there are two main strategies found in the institutions. The first is the 'Tool strategy', where technology is one of several tools used by both teachers and students. The second is the 'integration strategy' where technology is used to change the means of learning and organisation of learning activities. The development of new technological possibilities converge with processes tied to learning and organisation of learning activities (Hetland and Solum 2008).

The report also concluded with three main challenges. The first challenge is that what is defined as digital competence varies between the different university colleges, as do the methods used to implement ICT. There is also a difference between the aims and the actual practice in the classrooms, as that depends on the individual teacher. The second challenge is the difference in the use of ICT between the practice schools, and the different subjects within the schools. The third challenge is that new teachers, which are supposed to function as innovators and entrepreneurs, meet a variation in ICT-strategic work in different parts of the working life. The space between the frames in which they were educated, and those they meet in school, is too big. (Hetland and Solum 2008).

2.7 Aims and targets of the LK06

In this study, the focus is on the English subject at the upper secondary level. The English subject is regulated through two different curricula. The one that applies for the pupils at the vg1 level, as well as all pupils at the vg1 and vg2 levels vocational studies, is part of the subject curriculum that applies for the primary level and the lower and upper secondary levels. The English Subject Curriculum has different competence aims for the different levels. The other curriculum is the English-Programme Subject in Programmes for Specialisation in General Studies. This curriculum applies for the vg2 and vg3 levels at upper secondary, for those pupils who have chosen to specialise in English. Specialisation in English consists of International English (vg2), Social Studies English (vg3), and English Literature and Culture (vg3). All teachers that have participated in this study use one, or more of these curricula.

In the English Subject Curricula, under basic skills, we find the following about digital skills:

Digital skills in English means being able to use a varied selection of digital tools, media and resources to assist in language learning, to communicate in English and to acquire relevant knowledge in the subject of English. The use of digital resources provides opportunities to experience English texts in authentic situations, meaning natural and unadapted situations. The development of digital skills involves

gathering and processing information to create different kinds of text. Formal requirements in digital texts means that effects, images, tables, headlines and bullet points are compiled to emphasize and communicate a message. This further involves using digital sources in written texts and oral communication and having a critical and independent attitude to the use of sources. Digital skills involve developing knowledge about copyright and protection of personal privacy through verifiable references to sources. (LK06 2006 English Subject Curriculum).

In the English-Programme Subject in Programmes for Specialisation in General Studies we find:

Being able to use digital tools in English involves the authentic use of English, and paves the way for additional forms of communication and learning arenas. In many contexts, English-language skills are a prerequisite for being able to exploit new tools for extracting information for use in specialist contexts. Source criticism, copyright and personal protection are all key concerns in the digital arena.

(LK06 Programme Subject in Programmes for Specialization in General Studies).

It is evident that when talking about developing the pupils' digital skills, in all levels in English education in upper secondary school, the role of the teacher is important. The teacher has to facilitate that the pupils are able to use a varied selection of digital tools, media and resources. The teachers have to help the pupils gather and process information when creating the different texts. When the pupils are expected to develop knowledge about copyright and protection of personal privacy, it is up to the teacher to help them.

2.8 Digital Competence

2.8.1 Digital skills or competencies?

Digital competence, being digital competent, digital tools, digital skills, basic skills, ICT. The concepts are many, and for those who are not familiar with them they can be difficult to separate. Another complicating factor is that it does not seem quite clear what all of the concepts mean, or that there is a disagreement among writers on the subject. In this section, I aim to clarify these matters.

As mentioned in section 2.2, the Norwegian Directorate of Education and Training have published *Framework for Basic Skills* which purpose is to serve as a document used by the groups for English subject curricula when producing, or revising, the national curriculum. The framework is based on decisions made in the Norwegian Parliament, and it emphasises how

basic skills are defined and what basic skills are. In this document we find their purpose of digital skills as a basic skill. Basic skills are, according to the framework, *fundamental to all learning in all subjects as well as a prerequisite for the pupil to show his/her competence and qualifications* (Norwegian Directorate for Education and Training, 2012). Digital skills are in this sense explained as being a necessity, so that one can acquire digital competence. Kjell Lars Berge supports this in his article *Basics about the basic skills* (Grunnleggende om de grunnleggende ferdighetene) where he comments that competence is not something one has, but something one has to acquire (Berge, 2007). Up to date ICT in school has had to do with interest as well. Those teachers who find using digital tools in the classroom useful, seem to be those who have a special interest, and know much about it. Hildegunn Otnes, in the anthology *Being digital in all subjects* (Å være digital i alle fag), argues that being digital is an attitude and a lifestyle, and she emphasises the importance of a natural and reflected attitude towards the digital tools in the different subjects (Otnes, 2009).

The ideas expressed on the topic in Norway, are not of Norwegian origin. It predominantly originates from Organisation for Economic Co-operation and Development (OECD), and their work with developing 'basic competencies' called Definition of Selected Competencies (DeSeCo). The Norwegian Directorate for Education and Training has also found inspiration from Programme for International Student Assessment (PISA) in their work with developing basic skills in the most recent Norwegian curriculum (Berge, 2007). To understand the Norwegian development of the basic skills, it is interesting to look at OECD's background for defining and understanding a few core competencies. OECD sees it as necessary that students are given the opportunity to develop some basic competencies, to best meet the expectations from the society. In their formulation they use words like being able to lead a happy life in a well functioned society as why it is important to develop these basic competencies. OECD recognises three core competencies, where the third includes technology. The core competence is 'Using tools actively', where one of the subheadings is the ability to use technology in interaction with others. In the Norwegian Framework for Basic Skills they have developed an assessment form where they include the sub-categories recognised under 'Digital skills'. The sub-categories are to search and process, to produce, to communicate, and digital judgement. The framework has developed five levels of achievement within these sub-categories.

In the recent Official Norwegian Report, NOU2015:8 *The school of the future. Renewal of subjects and competences* (Fremtidens skole), Sten Ludvigsen has chaired a work assessing

the subjects in the Norwegian primary and secondary education in terms of what the future Norwegian society will need of competences. In the report, competence is defined as *being able to master challenges and solve tasks in various contexts, and comprises cognitive, practical, social and emotional learning and development, including attitudes, values and ethical assessments* (NOU2015:8 :20). In addition, it states that competence can be developed, and that it will show through a person's activities and situations. In other words, it has to do with the pupils' goals for learning and development. Using the concept *competence* focuses on what the pupil should gain of knowledge during his or her education (NOU2015:8). The committee behind the report defines digital competence as an important element when it comes to the disciplines in school. The committee sees digital competence as something that will intervene more into the other basic skills, as they are used digitally. An example is reading. *When reading digitally, pupils must deal with more complex expressions than previously* (NOU2015:8 :30). When it comes to digital skills as one of the current curriculum's basic skills, the committee finds that there is a need to renew the emphasis of the tool aspect. In addition, there is too much variation between the schools as regards the extent to which digital tools are integrated in school subjects. In 2005, Ola Erstad wrote that digital competence was a concept for the future, and that we had to wait to see what digital competence could become in the Norwegian school (2005). Maybe we have reached the future Erstad was talking about ten years ago? The school of the future where Ludvigsen and his committee thoroughly have looked into the use of digital tools, and the concept digital competence as it is used today, giving advice on how it should be used tomorrow.

The Ludvigsen committee distinguishes between different kinds of digital competences. ICT competence has to do with the use of digital tools and technology, whereas Information and media competence has to do with how one uses technology for different purposes, including learning about technology and media. The committee sees digital competence to be a more cross-curricular competence, relevant across disciplines. Digital competence has to do with mastering a variety of tasks, practical use, digital systems and software, security, critically thinking among others (NOU2015:8). Digital tools are a much bigger part of the Norwegian educational system today, and it intervenes into almost all other subjects as well as other basic skills in a new way. The questions that remains to be answered is if the teachers, who are the ones who are supposed to oversee the pupils' use of digital tools, are capable of living up to the task as digital tools were not a big part of most teacher educations in the last 20 years, and even less earlier. It is evident that teachers need, and want, more training, so that they are

capable of meeting the demands. This is a necessary cost if the Ludvigsen committee's 'School of the future' is to be a reality. Up to now we have seen a school where a big part of the teachers have not been able to follow the rapid development when it comes to the use of ICT in school. There has been a view that ICT in school will make it more efficient and the work more simplified. Little attention has been given to the fact that the increased use of ICT may increase the level of complexity, doubt and uncertainty (Haugsbakk, 2012). We have witnessed vague political visions, and ambitions, where the teachers, and the pedagogical view, have been set aside. The initiatives when it comes to technology has been incomplete, as well as unclear, and the expectations and visions on how ICT would enrich the Norwegian school has been too ambitious. The conclusion is that we are left with a gap between the expectations, and the actual results. There is a gap between the national curriculum's aims when it comes to digital competence, and the teachers' ability to realise them (Otnes, 2009). It is important to see the school as an institution or organisation as isolated, not comparing it to other organisations in the society. The school has its own characteristics, making it unique. Therefore, the expectations have to be adjusted to the type of organisation the school is.

2.8.2 Being digital in the English Classroom

As noted, the aim of this study is to say something about teachers of EFL and digital tools. As mentioned, English is one of three subjects in the Norwegian School, where digital tools are used most. English may also be the subject where it is most natural to use ICT and digital tools. Most of the written language on the internet, and texts about how to use digital tools are written in English. Without proper knowledge about the English language, it can be difficult taking digital tools into use (Lund, 2009). This should give EFL teachers an advantage when it comes to using digital tools, though this study shows that that may not be the case. Lund concludes in his article *Being digital in English* that digital, internet-based technologies are not just helpful to English as a subject, but that they are part of changing the terms in which we teach English. English is a subject that holds a special position when it comes to developing communication forms, as the English language is a global resource. The fact that Norwegian pupils have a high competence in what Lund refers to as general ICT knowledge, makes it easier to exploit Vygotsky's zone of proximal development. (Lund, 2009). When it comes to the zone of proximal development, Vygotsky was interested in the interaction between the pupil, as the learner, and the teacher. It is the teacher's task to structure interactions and develop instruction based on what the pupil already knows, or is already capable of doing. This is what is referred to as scaffolding (Vygotsky, 1978). A teacher of EFL

will be confident of this task when it comes to the English language subject. When it comes to digital tools, I am left with an impression that many teachers see themselves as novices in the field of ICT compared to a majority of the pupils, making the teacher-pupil role opposite.

2.8.3 Professional digital competence (PDC)

When it comes to research of ICT in schools in Norway, it has mostly been about how ICT is used in the classroom, and not so much about how ICT can contribute to learning, and how schools implement ICT in their organisation (Erstad and Hauge, 2011). Can a teacher become a proficient user of ICT in his or her work as a teacher, if the school as an organisation does not invest in equipment and in developing teachers' skills in ICT? This is where the concept of digital competent schools becomes important. Digital competent schools express the 'maturity' of the school when it comes to the use of digital media, which there are also developed tools to measure (Erstad and Hauge, 2011).

We have witnessed a development from the R-94 curriculum, where ICT was used as an instrumental aid in the English subject, to the LK06 curriculum, where being able to use digital tools is a basic skill. (Otnes, 2009). Digital competence is a larger part of the Norwegian national curriculum today, and there are clear expectations to what the pupils should gain of knowledge. What role does these changes play in the English classroom? The introduction of the PC-scheme, resulting in all pupils in the Norwegian upper secondary having their own personal laptop to use in school, changed the way we teach English, the way pupils learn English, and how we work with English in class. Maybe are the expectations to the teachers what changes the most.

Johannesen, Øgrim and Giæver (2014) look into teachers' digital competence in their article *Notion in Motion: Teachers' Digital Competence*. In the article it is noted that the school, because of the national curriculum, is obliged to develop the digital skills students will need. Together with the public view that Norwegian teachers' digital skills are limited, and the fact that there is no focus on digital skills or competencies in the Norwegian teacher training, there is a gap between what is expected of the teachers, and what they are actually capable of doing. (2014). Lund et al. (2014), addresses the problematic lack of PDC in the Norwegian teacher training in their article *What does Professional Digital Competence Mean in Teacher Education?* Lund et.al argue that PDC is the same as a deep technological understanding of the students' learning processes as well as understanding the practices that characterise the different school subjects (2014).

2.8.4 Digital Natives and Digital Immigrants

It is natural, in this context, to have a look at the concepts *Digital Natives* and *Digital Immigrants*. These concepts, introduced by Marc Prensky (2001), roughly divide all users of ICT into two groups: natives and immigrants. The students of today, is the first generation to have grown up with digital technology. They have had all sorts of digital tools available, and start school with a knowledge of how to use a great deal of them. Students of today will have spent half as much time reading as they have spent on videogames, and even less time compared to watching TV. On a number of levels we have witnessed an incremental development, e.g. clothing, language and style, but when looking at the change, or shift, when it comes to ICT there has been a big discontinuity. This new change in how a child grows up, and how pupils and students learn using digital technology has revolutionised not just the school system in most countries, but also the entire adolescence of most boys and girls around the world. Prensky (2001) has in what he saw as a lack of a more useful designation, called these boys and girls Digital Natives. By this Prensky means that they are native speakers of the digital language, which the rest of us, who did not have digital technology as part of our upbringing, can have difficulties understanding. The Digital Immigrants are those who, compared to the natives, have had to learn the use of digital technology, and keep up with the rapidly changing amount of tools and media they have to relate to both at work, and privately. Johannesen, Øgrim and Giæver (2014) add that being a digital immigrant does not necessarily have to do with the generation they belong to, but that it can be an issue of social class, education, gender or cultural background.

To different degrees, Digital Immigrants will manage to adapt to the new ways of thinking, speaking and working digitally. However, like in all other arenas in life, people learn in different ways, and have different interests. This way the digital immigrants develop what can be compared to their own digital accent. By this it is meant that though people learn, and adapt to new technology, they will still keep hold of some of the old ways that they feel comfortable with. According to Prensky (2001) this is one of the biggest challenges in schools today. The digital natives, who come to school to be educated, have to be so by the digital immigrants, who speak an entirely outdated language. The pre-digital language of many teachers today is not fully understood by those who have grown up using an entirely different, more modern language. Prensky has later made an issue of the fact that the school is not designed to meet the rapid change we see in technology. (Prensky in Johannesen, Øgrim and Giæver, 2014). When the next generation of teachers take over, the teachers who themselves

were born into the digital age, this will not be an issue to the extent it is today. Prensky's concepts are not supported by Ola Erstad. In his article *Educating the Digital Generation* (2010) saying that generational divides, where young people are over-generalised as being competent media users is problematic, due to the fact that it creates a public image of young people that does not apply for everyone, and therefore needs to be modified. Erstad emphasises the fact that there are huge differences between cultures when it comes to young people's use of digital media, and that these constructions blur as much as they enlighten. Buckingham (in Erstad, 2010) is another critical voice of the constructions, and has, through his writings based on his empirical data, created a middle ground between what he calls media optimists and media pessimists.

A third group has later been introduced by the Norwegian Professor Arne Krokan (2009), who in addition to the digital natives and digital immigrants, talk about the 'oldies'. The group that will not have a relationship to most of the digital technology that comes so natural to the natives, and having to be taught by the digital immigrants. The 'oldies' have no need for acquiring this knowledge, no need for a laptop or wireless internet, something which has become a necessity for all others of today's society.

2.9 Learning Management Systems (LMS)

A Learning Management System (LMS), or digital learning platform, is a selection of tools used as an aid in teaching activities and administration of these activities. These tools have a common database with shared access to documents and information. (The Norwegian Directorate for Education and Training, 2006). According to the interviews carried out in this study, the two Learning Management Systems used by the Upper Secondary schools in Norway are It's Learning and Fronter. This will be discussed in section 4.4.7.

In the fall of 2005 the Ministry of Education and research contacted the Norwegian Directorate of Education and Training about developing a project called *Creation of knowledge and function demands tied to the use of learning management systems*. (My translation) (*Kunnskapsdannelse og funksjonskrav knyttet til bruk av digitale læringsplattformer*.) (Norwegian Directorate for Education and Training, 2006). The backdrop, and startingpoint, was the emergence of the digital learning platforms, or Learning Management Systems, which is the more correct English term. The focus was on how these systems work pedagogically according to the pupils' learning processes and learning

outcome. Some of the conclusions found in the report are that a better pedagogical use of the Learning Management Systems gives better access to digital content, as well as sharing digital content. Also, the systems have been, and still are, an important catalyst for the schools' focus in ICT and the development of digital competence.

Chapter 3: Research design and method

3.1 Introduction

In the following chapter, the qualitative method used in the present study will be presented. Furthermore, the chapter looks into the strategies used, before focusing on the qualitative interview and the digital e-mail interview as an approach of gathering data. This section of the chapter will also contain a short note on the interview itself, as well as the process on how the collection of data was conducted, and how the work with analysing the interviews was carried out. The chapter ends with a note on ethical issues.

3.1.1 Choice of method

As mentioned in section 1.3, the ambition of this study is to say something about how EFL teachers' use of digital tools vary according to age, sex and geographical affiliation. With this as a point of departure, the research design had to be chosen. To best find out something about teachers' use, the best way was to let the teachers answer themselves, which is the reason why a qualitative design was chosen. A quantitative design could also work to carry out this study, where a questionnaire was developed, that could be sent to an almost unlimited number of teachers. The reason why a questionnaire was not chosen, was that it would not go as deep into the matter as desired. Not enough alternatives could have been developed for each question to cover the widespread of answers expected using a qualitative design, and the qualitative interview. The nature of the research question also suggested that the qualitative design was preferable as the aim is to learn something about how teachers experience the use of digital tools. The study also seeks to gain knowledge about the counties as a school-owner and employer, and their expectations to their teachers when it comes to the use of digital tools. As a researcher, it is in this study important that the respondents get to say what they want, and elaborate if they feel the need to do so, something which is not as easy in quantitative questionnaires. The goal is to understand the depth of the matter, as well as generate new theory and understanding on the exact topic. The qualitative design is a way to gain understanding of social phenomena (Thagaard, 2013) which is the aim of the present study. Qualitative methods also let the researcher go deeper into a matter than when using a quantitative method, which would show more width than depth (Thagaard, 2013).

3.2 The Qualitative Design

The qualitative design is a scientific method where the researcher uses one of the qualitative approaches to conduct a research. The qualitative approach means that there is a close contact between the researcher and the participants, through either observation or interviews. The researcher enters into the sphere of his or her participants in a more active way than when using the opposite scientific design; the quantitative method. The goal of the qualitative methods is to gain an understanding of social phenomena. Interpretation is therefore important. There are important issues when it comes to methodology and how the social phenomena are interpreted and analysed by the researcher (Thagaard, 2013).

Creswell (2012) states that the qualitative design is best suited when the researcher does not know the variables, and needs to explore. Also, as the literature might yield little information about the topic of study, and the researcher has to learn more from the participants. Thagaard (2013) follows up by saying that the qualitative design is best suited when there is little research on the topic, where flexibility and openness is important. There is not too much literature on the topic of my study, especially not in Norway. The choice of the qualitative design is in line with both Creswell and Thagaard.

To answer the research question in the best way possible, the participants need to say something about their experiences and thoughts on the use of digital tools. To achieve the most nuanced overview a qualitative approach is the best choice. Quantitative methods are less flexible, and do not reveal the same nuances (Christoffersen and Johannessen, 2012). A qualitative approach is more dynamic, and gives the researcher more room to ask open questions as well as being more spontaneous in an interview-situation. In face-to-face interviews one can enter themes introduced by the informant. The entire situation and the interaction between the researcher and the participant will be less formal, and can be experienced more as a conversation than an interview (Kvale and Brinkmann, 2009).

Observation is another qualitative approach. One could observe in a classroom, to find out what kind of digital tool the teachers used, but it would be too time consuming to gather the same amount of data as when conducting e-mail interviews, which is the case in this study. In an interview one is able to think about, and write about, both past and present procedures, as well as feelings on set topics, something that can be difficult to observe. According to Christoffersen and Johannessen (2012), people's experiences and perceptions are best shown when the participants themselves can have an effect on the researcher's questions. The same

authors claim that *Social phenomena are complex, and the qualitative interview makes it possible to show the complexity and the different nuances* (My translation) (2012:78).

3.3 Strategies

3.3.1 Pilot testing

After having developed the questions, a pilot study was conducted. This was because of the uncertainty of the amount of data that would be received through the interviews, and therefore an uncertainty of the number of respondents that would be needed. Pilot testing one's questions is also important. Pilot testing shows the researcher, among other things, if the informants understand and are able to answer the questions. When the respondent has all the questions in writing, and the researcher is not there to elaborate or explain, it is very important that the questions are clear and understandable. Meho (2006) states that the questions in an e-mail interview must be more self-explanatory than those one would pose in a more traditional interview, something that will decrease the possibility of misinterpretation.

The result of the pilot study would show if the questions needed to be modified. (Creswell, 2012). In the pilot study, three participants were chosen. The participants were of both sexes, and represented three of the four different age groups into which the participants would be divided. Interestingly enough, one of the participants chose to return the interview with handwritten answers, while the others sent it back electronically. This showed that it could not be expected that all the participants, or informants, had the same level of skills when it came to editing documents. Further, the pilot study showed that the interview did not produce as much data as initially thought, and therefore it would be beneficial to increase the number of respondents.

3.3.2 Selecting and Choosing of Informants

Choosing one's respondents is an important part of any research, qualitative or quantitative. In qualitative methods the aim is to get as much information as possible out of a limited number of respondents. How big a researcher's selection of informants should be depends on the research question as well as the method one chooses to use gathering data. (Christoffersen and Johannessen, 2012). The research question of the present study distinguishes between age, sex and geographical affiliation, and would need the answers to spread between both sexes as well as the four age groups into which the respondents were divided.

3.3.3 Collecting data

Having finalised the research question, and finished the line of questions after conducting the pilot-study, it was time to design the interview (see sections 3.4.2 and 3.4.3) and send it to the potential respondents. The potential respondents were all the English-teachers in the upper secondary schools in Norway.

First an overview of all the upper secondary schools in the different counties had to be made. This was done by using the different counties' homepages, where they had listed all their upper secondary schools, and included the e-mail addresses to all of them. There are 329 county-run schools in Norway. A decision was made to contact the school's receptions, and have them forward the e-mail to the English-teachers.

An e-mail was sent to all the schools where it was briefly explained the purpose of the contact (appendix 3.1). The e-mail asked if they could please forward the mail, including its attachments to the English-teachers of the school. The forwarded mail included a letter to the teachers explaining the purpose of the study (appendix 3.2), as well as the attached interview (appendix 3.3). Instructions were given on how to edit the document, before returning it. In the beginning it was sent out e-mails to three schools in each county, and the amount of schools continued until there were none left, or there was one response, preferably two, from the different counties. 202 schools were contacted. Twelve schools were contacted twice and seven schools were contacted three times. The reason for contacting them more than once is that it at that time were no responses from the schools in the counties in question. As there was no pre-set deal with respondents about doing interviews, as one would do when conducting a more traditional qualitative interview, it would be more difficult to get teachers to answer the interview, as they had no obligation to do so. It turned out that the best way to receive answers was to send the e-mails out in the evening, so that they were sent to the teachers first thing in the morning.

After several weeks, 48 responses were received, representing 18 counties. Unfortunately, there were no answers from any teachers of the seven upper secondary schools in the county of Aust-Agder. These seven schools were all contacted three times, without any luck in making any form of contact. As the schools had been contacted as many of three times, without any answers, a decision was made that the study had to be finished without any responses from the county of Aust-Agder.

As mentioned, after contacting 202 schools, 48 replies were received, representing all counties except Aust-Agder. Initially the thought was that ten respondents would be sufficient, but after the pilot study, which showed that the data produced was not as much as expected, the decision to increase the number of respondents was made. In addition, as the interviews were conducted digitally, there was no need to transcribe them, as they were already there in writing. As the research seeks to find a difference between sexes and age groups as well, a big number of respondents as possible would be needed, so that the answers covered all age groups and both sexes.

The interviews were conducted between the end of January and the middle of April 2015. It was a conscious choice to wait with the interviews until after Christmas, and after the end of the 1st term, which is normally in the middle of January. December and January is usually a stressful period for all teachers in upper secondary as the classes have their mock exams and other tests to make sure there is a basis to grade the pupils in mid-January. The interview would probably not have been received well in the middle of that stressful period. Therefore, the interviews were sent out in the end of January when things had calmed down. When sending out e-mails with interviews, without having made agreements with the respondents beforehand, the time it takes to receive answers can be a challenge. (Meho 2006). Some respondents send their reply quickly, while others may use weeks. In the letter to the potential respondents, a date was given for when to send the interview in return. That might have made some teachers decide against participating, as a pressure was created. Still, as a researcher one does need to know approximately when one will have the data ready for analysis.

3.4 The Qualitative Interview

In this study a structured digital interview have been used. All the potential informants received the exact same interview. According to Anne Ryen (2002) we live in an interview society. This society is dependent on the face-to-face interview, but also on the more modern way of collecting qualitative data, the e-mail interview, or other ways of using a computer or the internet to conduct interviews. There are varieties of the qualitative interview where some have little structure, which gives the researcher the opportunity to change, or add to, the questions in case the participant introduces new themes on the subject. This version of the qualitative interview can be compared to an open conversation between the researcher and his or her informant (Thagaard, 2013). On the other side of the scale, we find the structured

interview. The structured interview has set questions that cannot be changed during the implementation. The qualitative aspect of the structured interview is that the respondent is free to create his or her own answers (Thagaard, 2013); they do not tick boxes with different alternatives like in a quantitative survey. The advantage with the structured interview is that the answers are comparable, as all the respondents have answered the exact same questions (Thagaard, 2013). In this study, a structured interview was the choice, as the interviewed has been conducted using e-mail. All the informants have answered the same 15 questions. Some have given more information than others, but they have all given information on the exact same subjects through the entire interview, giving the opportunity to compare the content. A researcher can also use a semi-structured interview. This is, according to Thagaard (2013), the most common way to conduct the qualitative interview. A semi-structured interview is partly structured. The themes of the interview is mainly set, but the order can be changed during the implementation. That way the researcher may follow the participant's story, but still make sure all relevant, or important, themes are included during the interview (Kvale and Brinkmann, 2009).

3.4.1 The digital interview

There are, as mentioned, several ways of performing the qualitative interview. The technological development we have seen the last decades, makes it less necessary to interview people in person (Ryen 2002), but gives the opportunity to interview people using computers, the internet, skype and e-mail to mention some. We no longer need to sit down face to face with someone when conducting our interview. Online research has some requirements to both the researcher and the respondent. One needs access to the internet, and one needs to have some level of digital/technical competence (Ryen 2002). An article by Meho (2006) discusses several studies where e-mail has been used as a tool of interviewing. The article summarises findings from all the studies, and discusses benefits of, and challenges associated with, using the e-mail interview. (Meho 2006) In an e-mail interview, the interviewee needs to know how to open, read and send e-mails, as well as how to edit documents. Interviewing through e-mail can include the same challenges as interviewing in a more regular manner. The researcher still has to establish a relationship of trust to the respondent. It can also be a problem to get the respondents to answer, and there is a question if the data collected will be enough, and as useful as we hoped. When interviewing face to face, the researcher can adjust the questions as he goes along, so that the data collected suits the expectations he had. Another problem is that the researcher misses body language, pauses, smiles, laughter, and discontent and so on. We

miss all this non-verbal communication in an e-mail interview. Other disadvantages are that it is difficult to make sure the respondents answer all the questions, and that it is more challenging forming the questions, as you have to make sure you keep the respondents attention though the entire interview (Ryen 2002). There are positive sides with the e-mail interview as well. It is time- and moneysaving, as the researcher does not have to travel, make arrangements and sit down and actually conduct the interview. Conducting normal face-to-face interview where the researcher has to travel to reach the respondents is not only expensive, but it takes a lot of time. These challenges are not present when conducting the interviews using e-mail (Meho 2006). The respondents can answer when they feel they have time, which is a less stressing situation. In an e-mail you can include attachments as pictures, text- or sound files. You are not dependant on good chemistry with your respondent. The respondent formulates, and produces, all the data, which simplifies the question of validity (Ryen 2002). When conducting a study, one just has to see if the positives outweighs the negatives when it comes to choosing e-mail, or digital interviews. The participants in this study could not have been interviewed in any other way than using e-mail. It would have been too time-consuming. 48 respondents from 18 different counties could not have been reached more efficiently than through e-mail. Cost and efficiency are therefore the main positive sides of e-mail interviews. In addition, as e-mails do not cost anything, a researcher can reach respondents in any part of the world. There are no geographical limitations. In addition, when interviewing using e-mail, one does not have to spend time transcribing the material. Transcribing takes a lot of time. In most cases, a researcher will record the interview, and then write down everything that was said, including sounds and pauses. This is another timesaving positive side of using interviewing digitally.

In earlier studies, of a smaller scale, when conducting more traditional face-to-face interviews the material gave room for creating follow-up questions as the interview went along. When comparing the amount of material, the impression is that the answers to an e-mail interview have a tendency to become shorter. By this is meant that when a respondent has to actually write the answers, the answers will be shorter than what they would be had he or she been interviewed orally. It is as simple as writing taking longer time than speaking, and the researcher moves some of his or her workload over to the respondent.

Another important point Meho makes in his article is that when using e-mail interviews one allows groups or communities that could have had problems participating in the more traditional ways of qualitative research. He states that e-mail interviews democratises and

internationalises research. Here he is talking about people who have different disabilities of any kind, illnesses or those geographically dispersed (Meho, 2006).

3.4.2 The interview of the present study

As mentioned, the reason for choosing the qualitative design and the qualitative interview was the aim to gain knowledge about the experiences, and thoughts of the informants. It was therefore important that the questions asked were in a manner that benefitted the research in the best way possible. In the beginning of designing the interview, there was bit of a trial and error. In addition, after conducting the pilot study, it became clear that some of the questions had to be modified to receive the best possible responses, especially concerning the thoroughness of the answers. Still, questions where my respondents felt they would have to produce a lot of text were not asked, as that could make them decide against answering. As the interviews were conducted using e-mail, the interview would have been a structured interview, where there would be no possibility changing any of the questions. All respondents would answer the same questions. The questions would be set before the interview, something that can remind of a pre-coded survey. The difference though, is that the e-mail interview has open-ended questions, so that the respondent can answer in his or her own words, short or long answers (Christoffersen and Johannessen, 2012).

3.4.3 Purposes and intentions

Question 1: Please state your gender and age.

The purpose of this question was to categorise the informants into gender- and age groups.

Question 2: Please state for which county you work.

The purpose of this question was to categorise the informants according to geography. The answers would allow me to compare answers from different counties, therefore different school owners/employers.

Question 3: What kind of education do you have?

The purpose of this question was to see what kind of education the respondents have, as it might be a factor when it comes to knowledge about digital tools.

Question 4: How long have you practised as an English-teacher?

The purpose of this question was to see the difference between teachers who have practiced for a long time, and those who have not. The most important factor when it came to this was

that those who have practised less than 7 years, would not have taught before the PC-scheme was introduced. These teachers will not be able to compare teaching before, and after.

Question 5: Is there a difference in how you teach English now, compared to before the PC-scheme was introduced?

The purpose of this question was to see what differences the PC-scheme has brought with it in terms of teaching English.

Question 6: What is your level of skills when it comes to digital tools?

The purpose of this question was to see how the teachers rated their own skills. This could affect the amount of digital tools they use, and the kind of tools they use. It will also show if they have had sufficient training.

Question 7: What kind of digital tools do you use when teaching English?

The purpose of this question was to get to know the exact kind of tools the teachers use in their teaching of English.

Question 8: Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

The purpose of this question was to see if the teachers see the PC-scheme as beneficial to their work as English-teachers.

Question 9: Do you use the textbook as much as before the PC-scheme was introduced?

The purpose of this question was to see if the PC is taking over as the main educational resource, or if the textbook still has an important place in the English classroom. It is interesting to compare the age groups and see the differences.

Question 10: If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for?

The purpose of this question was to see what kind of tasks the teachers use when they choose not to use the textbook, as well as compare the answers and note the differences.

Question 11: Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person?

The purpose of this question was to see to which amount social media have entered the English classroom. It is an interesting comparison to see who uses it frequently, and who chooses not to. Some do not use it because they are not that familiar with it, and do not use it privately, while others choose not to use it in school, but do use it as a private person.

Question 12: If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English-teaching?

The purpose of this question was to see if the learning platforms are used to its full potential.

Question 13: What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

The purpose of this question was to let the teacher say what they see as challenging with the PC-scheme. Most teachers have issues at some level when it comes to the students having their own PCs in class. It is interesting to see what these challenges are, and if there is a pattern in who sees the different challenges.

Question 14: Has your employer given any form of education/training when it comes to digital tools?

The purpose of this question was to look at the employer, and how they meet the demands in for example the curriculum. If teachers, of all ages, are expected to use digital tools, there must be some sort of training provided so they feel comfortable and secure in their use. It seems this is a problem in the schools, and counties, represented in this study.

Question 15:

Does your employer have any expectations to you as an English-teacher when it comes to the use of digital tools?

The purpose of this question was to see if there is correlation between the goals of the directorate, the expectations of the employer and school owner and the practice in the schools.

3.4.4 Analysis

“To analyse means to divide into pieces or elements” (My translation) (Christoffersen and Johannessen, 2012). After having analysed the data, the researcher will draw a conclusion as an answer to the research question. First, all interviews were read several times to get a good knowledge, and overview, of the content. The collected material was then categorised. The

categories were made so that they would best answer the research question, and hypotheses. Chapter 4 will show results by categories.

When analysing the material, or data, Creswell's six steps for analysing qualitative data was used (2012:236). These steps are:

1. *Preparing and organizing the data for analysis.* There were 48 interviews that were all in folders on the computer. There were 18 folders, representing the respective counties. In each folder the interviews from that county were saved. A decision was then made to analyse by hand, as that felt more comfortable, as it can give a better overview of the data when getting to write down as one goes along. In addition, as the data did not consist of a huge amount of pages, there would be no problem keeping track with it all. Transcribing, something that normally is a time-consuming job, was not an issue, as all the answers were already in writing. The saved time could therefore be used to hand-analyse. Creswell points out that hand analysing, meaning that researchers read data, then mark it by hand, can be beneficial when analysing smaller amounts of data, where it is easy to keep track of files. Further hand analysing can be good if someone is not too comfortable using computers. When hand analysing the researcher will feel closer to the data. A last important factor is time. The researcher needs time to do the labour-intensive activity of hand analysing, as it takes time to sort and organise data by hand (2012).
2. *Engaging in an initial exploration of the data through the process of coding it.* After having organised the data, it was time to start the analysis. The interviews were read a few times, which gave a general sense of what the data was about. Markings were given on findings of importance that would need to be made special note of in the analysis. Further, the data was coded. The informants were divided into a female and a male group, as well as four different age groups, which through the entire analysis would be used when looking for similarities and differences. The questions were categorised as to which part of the research questions they were meant to help answer. This process helped assign the questions to themes.
3. *Using the codes to develop a more general picture of the data- descriptions and themes.* When initially looking through the interviews, the themes and categories emerged. When going through all the answers again, with the themes, or categories in mind, personal notes were made on numbers and findings. Tables and figures were sketched, and finding the variables that would be beneficial to both the research question, as well as the answers received.

4. *Representing the findings through narratives and visuals.* In this step tables and figures were produced, and information from the analysis was filled in. Four sector diagrams were made from the age and sex of the informants, and 12 tables representing the eight different categories. Some sub-tables were also made to show a more nuanced picture. This section also included notes and explanations to the tables.
5. *Making an interpretation on the meaning of the results by reflecting personally on the impact of the findings and on the literature that might inform the findings.* The results were discussed in light of the research questions, the hypotheses and the theory presented in chapter 2. Including quotes from informants in the discussion made some of the results clearer.
6. *Conducting strategies to validate the accuracy of the findings.* The rather low number of respondents can argue that the results are valid for the 48 respondents, more than of the entire number of teachers in Norwegian Upper Secondary schools. The results cannot be said to be invalid as they give ideas about how teachers cope with digital tools, about their digital competence as well as the employers practice in the area. They also make ground for further research in the area.

The 15 questions were divided into categories. Questions 1-4 were used to divide the informants into age/sex/geography categories. (See Fig. 4.1-4.4) I divided the remaining questions into 8 categories.

Table 3.1 The categories

Cat. 1	Teaching before and after the PC-scheme
Cat. 2	Level of skills
Cat. 3	The tools teachers use
Cat. 4	PC-scheme as positive/negative. What are the challenges?
Cat. 5	The PC vs. the textbook
Cat. 6	Social Media
Cat. 7	Learing platforms
Cat. 8	The employer

3.4.5 Ethical issues

This research was reported to The Norwegian Social Science Data Services, NSD, in the fall of 2014, and was approved not long after. (Appendix 3.4). The NSD is, according to their own homepage, “*the Data Protection Official for around 150 research and educational institutions, including all Norwegian universities*” (<http://www.nsd.uib.no/personvern/en/index.html>).

When sending out the e-mails, a letter was included to the teachers who would participate in the research. In this letter (Appendix 2), it was briefly explained why they were contacted, as well as what the research was about, without giving too many details. Further a promise was given that their name, under any circumstances, would not be known, as well as how that was being secured. The letter also stated that the interview did not contain questions that could identify them.

3.4.6 Quality, reliability and validity of the research

Validity is a question of how relevant the data is. The data produced by this study, cannot be viewed as reality itself, but representations of reality. A question a researcher has to ask is how well the data represents the phenomena that is looked into (Christoffersen and Johannessen 2012). When producing the categories there was an aim to keep the question of validity in mind through the process. The categories needed to represent answers to the questions raised in the research question and the hypothesis. When deciding on the eight categories used, it was because they represented the phenomena in a good way.

Of course, how people, or respondents, experience the same phenomenon can vary. The results could have been different had the distribution of the respondents been more varied: had there been more male respondents, or had there for example been an overweight of senior teachers. The way this study was conducted, is also an important factor when it comes to the outcome, as the questions are all created by the researcher, to which the answers create data, and further new theory on the subject. As an endnote on validity, it should be included that the study is valid, if not all for all teachers in Norway, at least for a great deal, and especially for this exact selection.

When it comes to reliability, the question is if the data can be trusted. Is the study conducted in such a way that the results are trustworthy? This has to do with how the data has been collected, and how it has been processed. This study has followed Creswell’s six steps for analysing qualitative data, and therefore there is a confidence that the study is reliable. There

is openness about how the entire study has been conducted, and appendices are included so that the readers can follow all the steps taken through the work when it comes to making contact with the selection, the interviews, all the categories, and important numbers and other appendices that might be of interest.

3.5 Possible limitations

When planning the interview, and how to reach the respondents, it was hard to predict that it would take as much time as it did to receive the preferable amount of answers. It was believed that when contacting as many schools, that maybe the double amount of answers would be received. After conducting the research, it is evident that digital interviews may be time- and moneysaving, but on the other hand one is left with the feeling that the answers received are more of chance. Had arrangements been made with a set number of teachers beforehand, who then knew that they were, and had agreed to, do the interview, the answers might have been longer and more thorough. Many of the answers received were short, some were deficient, and some were even missing. The reason may be that the respondents did not feel an obligation to answer, as they would have had they been contacted beforehand.

As mentioned in section 3.4.4 all participants received information about the research as an attached file in the e-mail. Maybe it would have been better to include the most important information in the actual e-mail, as some may delete it before reading the attachments. (The interview was attached as well). Maybe the information about the importance of their participation in the research should have been made clearer.

When sending out a digital interview, where one is expected to edit the attached file, save it to one's own computer, and then add it as an attachment in an e-mail, it is possible that only those feeling confident with ICT choose to participate. This can of course be a limitation to this study, as those who do not feel confident are just as important to the study as those who are. Hopefully this did not prevent too many potential respondents from participating. Some may have conquered their digital difficulties and answered the interview because they felt the research revolves around a theme that needs to be focused on. That was also the impression after having read all the responds.

As mentioned in point 6 in section 3.4.4 one would need a bigger number of respondents for the study to be more valid. The results of the study cannot say something about the use of digital tools of all teachers in the Norwegian upper secondary schools, or the digital

competence of most teacher. This study gives ideas about some of the problems that are present among teachers and the schools and counties as employers today.

After conducting the interview it is clear that question 11 should have been asked differently. It is a yes/no question about whether the respondents use social media in the classroom or not. They are further asked to state which social media they use. It would have been a positive contribution to know how they used social media in their EFL lessons.

Chapter 4: Results and Discussion

4.1 Introduction

In the previous chapter, the methods for gathering the data was presented. This chapter shows the results of the analysis of the data. After the first initial figures, showing the distribution of the respondents when it comes to age and sex, a table will give an overview of the number of respondents from the different counties.

The results will be presented in the order of the categories shown in table 4.2, and will be discussed according to the literature presented in chapter 2, and in light of the research question and hypotheses presented in chapter 1.

4.2 Findings and results

Age and sex.

The first four questions of the interviews were questions to place the informants into the age/sex/geography categories. Of the 48 informants 36 were female (75%), and 12 were male (25%). As the aim was to see if there was a difference according to not only sex, but also age, four age-categories were created. The lowest, 25-35 years, had 11 respondents (22,91%, 5 male, 6 female). The next category, 36-45, had 14 respondents (29,1%, all female). The third category, 46-55, had 12 respondents (25%, 2 male, 10 female). And the last, 56-67, had 11 respondents (22,91%, 5 male, 6 female). As will show from the diagrams under, the categories are evenly distributed between the age of the respondents.

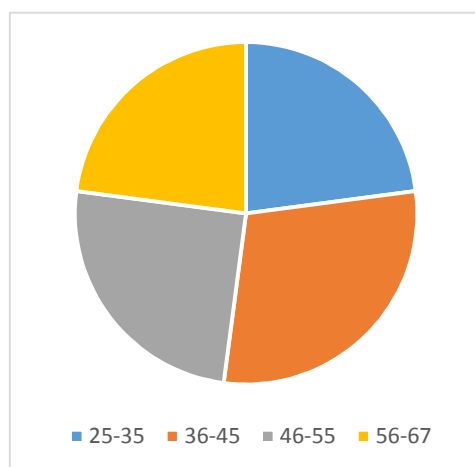


Figure 4.1 Age

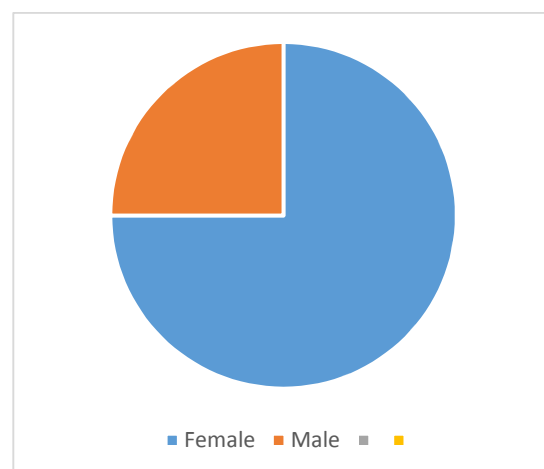


Figure 4.2 Sex

As is seen from the ‘Age’ sector-diagram, the categories are equal. From the ‘Sex’ sector-diagram, it is obvious that women are the majority of the study.

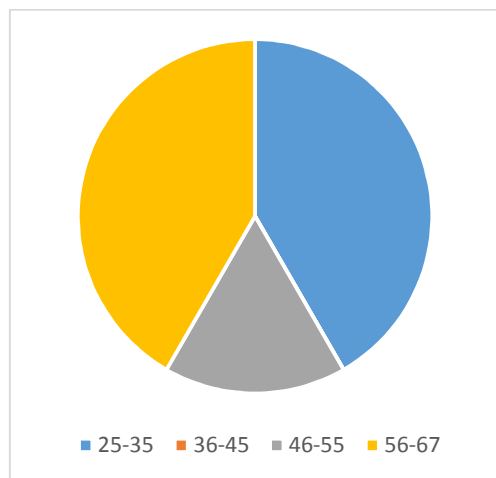


Figure 4.3 Male

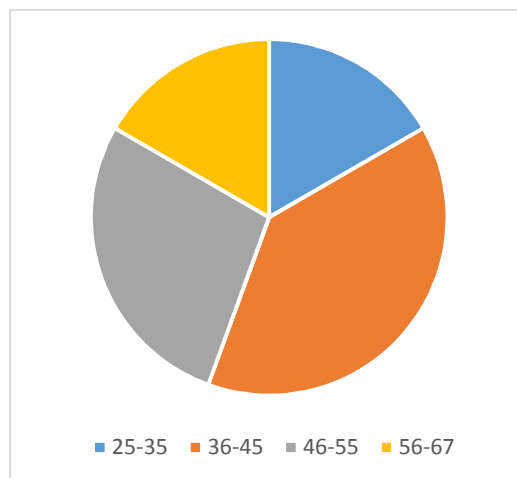


Figure 4.4 Female

When looking at the ‘Male’ sector-diagram, the youngest and oldest categories are higher represented, while one category is missing. Looking at the ‘Female’ sector-diagram, we see that the category missing from the ‘males’ is the highest represented one, while the youngest is slightly bigger than the two oldest ones.

4.2.1 Geography

Table 4.1 Number of informants from the various counties

County	Number of informants	Percentage
Akershus	1	2
Buskerud	4	8,3
Finnmark	2	4,1
Hedmark	3	6,25
Hordaland	5	10,4
Møre og Romsdal	2	4,1
Nordland	4	8,3
Nord-Trøndelag	2	4,1
Oppland	3	6,25
Rogaland	4	8,3
Sogn og Fjordane	3	6,25
Sør-Trøndelag	3	6,25

Telemark	3	6,25
Troms	2	4,1
Vest-Agder	3	6,25
Vestfold	1	2
Oslo	2	4,1
Østfold	1	2

As mentioned in the previous chapter, there were 48 informants. These 48 teachers represented 18 out of 19 counties. The county of Aust-Agder is not represented in this study, as there unfortunately were no responses from any of the seven upper secondary schools. As can be read from the table, there are most informants from the county of Hordaland, whereas there is one informant from three of the counties. A decision was made that one informant was enough to give the information needed, and that the information given had to be trusted to be correct, as there were no other replies from the same counties to compare them to. It did give a chance to compare those counties to the others in the study. This was discussed in section 3.5, limitations.

4.3 Categories

The categories were also given in chapter 3. As the results in chapter 4 are given by categories, they are given in this chapter as well.

Table 4.2 *The categories*

Cat. 1	Teaching before and after the PC-scheme
Cat. 2	Level of skills
Cat. 3	The tools teachers use
Cat. 4	PC-scheme as positive/negative. What are the challenges?
Cat. 5	The PC vs. the textbook
Cat. 6	Social Media
Cat. 7	Learing platforms
Cat. 8	The employer

4.4 Results and discussion by categories

4.4.1 Category 1 – Teaching before and after the PC-scheme

This category dealt with the answers from question 5 in the interview.

Table 4.3 Difference in teaching before and after the PC-scheme

Is there a difference in how you teach English now, compared to before the PC-scheme was introduced.			
Females		Males	
Yes	24	Yes	7
No	12	No	5

This question opened for the respondents to say something about how their teaching today differs from their teaching before the PC-scheme was introduced. It is only natural that the way English is taught has changed, now that there is a PC in front of every pupil. Though teachers easily recognize a number of challenges the PC-scheme brought with it, one can conclude that they are outweighed by several positive effects from the PC entering the classroom. It becomes evident early that there is great variety in digital tools and aids the teachers use in their work as an English teacher.

As the pupils all have their own personal laptop, and have internet access at all times, many of the situations where teachers used the book to communicate information to the pupils, can now be found online. This also makes it easier for the teacher to vary between different kinds of sources and use more updated sources, than if one still only had the textbook to rely on. Teachers also use NDLA as a supplement to the textbook. As mentioned in section 4.5.3, NDLA is owned, and run, by 18 of the counties, and it will of course be in their interest that the teachers in upper secondary use this tool (<http://om.ndla.no/rapporter>). Other aspects that characterise the new practice are that there are more interactive exercises than before, and presentations are more modern. The PC has opened for a new flexibility that was not there earlier.

As mentioned, the answers show that the change has not only been positive. Answers like: “I stand more in the back of the classroom, to keep an eye on the students’ screens” and “I had to stop having book analysis as home work” are evidence that there have been, and still are, some challenges. As a teacher one can never be sure what the pupils do on their laptops.

There are so many temptations on the internet, so many ways to communicate and chat with

the others, that sometimes the desire to do something else than what the teacher asks becomes too tempting. This is probably part of the reason for some teachers being critical to the use of internet in class, as also was a finding in the Monitor study of 2011 (Egeberg et.al 2012). Another part of the problem may be the fact that the pupils have more knowledge about digital tools than the teachers, and it may therefore be easier to use the laptop for tasks the teacher will not understand. This is an expected problem to occur between the pupils, who belong to the digital generation, and many of the teachers who belong to earlier generations. This is what happens between the digital natives and the digital immigrants (section 2.8.4) that Mark Prensky so appropriately called them (2001). Then again, when a quote from the same category is that “pupils are more motivated now”, teachers might be able to live with the digressions now and then, if the access to computers and internet makes the pupils more motivated in class.

As we see from the answers in this category most teachers teach English differently now compared to before the PC-scheme was introduced. As many as 17 answered that they did not, but there is an explanation for this. Several of the informants had no experience working as teachers before the PC-scheme, and had therefore always used digital tools. The most striking differences the informants give are that information can be accessed faster, and they no longer have to send the students to the library, which is timesaving. The use of learning platforms, or Learning Management Systems, like It’s Learning and Fronter is also mentioned as a change of improvement as it makes it easier for the pupils to store their work and other information, as well as handing in texts and other work. Further the use of film clips in teaching (You Tube), making teaching more varied, and using the textbook’s resource pages online are positive progresses according to the respondents.

There is a great variation in what is seen as positive, and what is useful. Where someone sees possibilities, others will see challenges. There is obviously a variety in the tools teachers use, and see useful, which has a connection to their digital competence, which were two of the hypotheses of this study. Erstad (2005) wrote that it in the early days of trying to implement ICT into the Norwegian school, it was only those who had an interest in digital tools who used them. This seems to be the case today as well, just to a smaller extent. Maybe Hildegunn Otnes (2009) is right in arguing that being digital is a lifestyle. If a teacher does not develop a natural and reflected attitude towards the digital tools which we use for teaching today, they will be trapped in the old ways of teaching before the entrance of digital tools into the Norwegian upper secondary schools.

4.4.2 Category 2 – Level of skills

This category contains the answers from question 6 in the interview: *What is your level of skills when it comes to the use of digital tools?* In the interview this was an open ended question. As seen in the table below the responses were divided into four categories, and the answers were placed. The categories were made from words the informants used, like for example, average and advanced.

Table 4.4 Level of skills

	Below average	Average	Above average	Advanced
FEMALE				
25-35		2	2	2
36-45		3	7	3
46-55		6	3	2
56-67	1	2	1	2
MALE				
25-35		1	2	2
36-45				
46-55		1	1	
56-67		2	2	1

From this table one can read that most teachers see themselves as average and above users when it comes to digital tools. The table shows that female teachers aged 36-45 have most respondents who see themselves as above average and advanced users, whereas the female category 56-67 is the only category where a teacher has ticked off below average. The numbers that stand out are females aged 36-45 and 46-55, who see their skills as average and above. Though the differences are not alarmingly big, the answers show tendencies when it comes to digital skills and age. It is also in line with one of the studies' hypotheses that there is a big difference when it comes to the digital competence of English-teachers. It also shows one of those varieties that the research question of the study addresses.

According to Johannesen, Øgrim and Giæver, in their article *Notion in Motion: Teachers' Digital Competence* (2014) the lack of digital skills among Norwegian teachers, is a result of

the absence of any training when it comes to digital skills or competencies in Norwegian teacher training. Still, had that been a very serious problem for teachers today, the numbers in this category would probably have shown so. Though it through the years were intentions about increasing teachers' digital competence, through programmes like PLUTO (Program for Teacher Education, Technology and Realignment), big changes did not occur (Erstad, 2005). This does not mean that teachers in Norway have not increased their skills. Norwegian teachers have been forced to learn, either themselves, or with help from more proficient colleagues, to keep up with the increasing digital expectations. One of the informants said that their school had groups of teachers where they had meetings to share ideas about the use of IT in the classroom. They also had mandate to help colleagues, who had a lower level of digital competence. Others also mention that the training they have received is from other teachers who are more advanced users. There is little formal training provided by the employer. When it comes to the employer providing education/training, many say that it has mostly to do with administrative digital tools like SkoleArena and Learning Management Systems. We know, from the study by Hetland and Solum, *Digital Competence in Norwegian Teacher Training* (2008), that the teacher training in Norway does not include much training in digital competence.

There are challenges when it comes to the gap between what the students learn in their education compared to what actually meets them as teachers in the different schools. The variation we see between schools when it comes to how much digital tools are integrated is a question raised by the Ludvigsen committee in the Official Norwegian Report *The School of the Future. Renewal of subjects and competences*. The Ludvigsen committee also distinguishes between different kinds of digital competences. The committee recognises ICT competence as something that has to do with the use of digital tools and technology, while Information and media competence has to do with how one uses the technology for different purposes (NOU2015:2008). When considering that there have been aims of implementing ICT into school subjects from the late part of the 1980s (Erstad 2005), there is still no set procedure between the education institutions when it comes to digital competence, or methods used to implement ICT in Norwegian teacher training. There is also a challenge that there between schools is a too big gap when it comes to the use of ICT, which is reflected in the 48 interviews in this study, representing the practice in 18 counties. The main issue seems to be that there is no formal training provided so that the teachers can feel more confident when helping the pupils meet the digital aims of the national curriculum.

Furthermore, on the positive side, the teachers mention that the use of tools like smartboards, PCs, smartphones, iPads and Smartbooks, to mention some, have forced them to be better users of digital tools.

4.4.3 Category 3 – The tools teachers use

Category 3 include answers from question 7 in the interview: *What kind of digital tools do you use when teaching English?* At the end of the interview a note was included listing examples of digital tools, but also asked the informants to mention tools that were not mentioned in the note. After analysing, this category left an impression that many do not see the need to mention the PC as a tool they use, whereas others do. Not mentioning it is most likely because the PC is a necessity we all use to be able to use the other digital tools mentioned. For many of the informants the PC goes without saying. It is also important to mention that the tools used in the table are all tools mentioned by the informants themselves. It would be a limitation to the research if the tools were be pre-set in a list for the informants to choose from. Letting the informants themselves mention the tools they use, gives a much wider range of digital tools.

Table 4.5 Tools teachers use

Digital tool	No of users	Female users	Male users
PC	28	19	8
Learning platform	28	22	5
Textbook resources	20	16	5
You Tube	16	14	3
Smartphone	14	11	1
NDLA	13	12	1
Kahoot	12	11	1
Power Point	10	8	2
Smartboard	8	6	2
Social media	8	8	
E-books	6	2	4
Quiz-let	6	6	
iPad	6	2	4
Google tools*	5	3	2

Microsoft Office	5	3	2
Prezi	3	3	
Blogs	3	3	
Online news	3	3	
Audacity	3	2	1
Microsoft moviemaker	2	1	1
Microsoft publisher	1		1
Digital dictionaries	1		1
Writing tools	1		1
iTunes	1	1	

*Google tools are all tools google provide. (Maps, translators etc.)

As seen from the table the PC is the tool most teachers use. The table shows that 28 out of 48 say they use a learning platform, or a Learning Management System (LMS) (see section 2.9). If the 20 teachers who have not mentioned it actually do not use it, or have just forgotten to mention it is not known, though I do think the latter is most likely. The learning platforms are important in today's schools, and many schools and employers have clear expectations that the teachers, and students, use them.

From the table we see varieties when it comes to sex. There are some tools only male teachers say they use, and some only used by females. It is obviously easy to forget to list a tool when one is just supposed to mention all tools one uses. The low number of male participants is also a probable reason. The fact that this low number of male teachers does not use prezi for example, is not the same as this being a tool used by few male teachers.

An interesting finding in this table is that only female teachers say they use social media when teaching English. A reason can of course be that 36 of the 48 informants are women. This table does not say that male teachers do not use social media when teaching, for that the number of male informants is as mentioned too small. It shows that none of the 12 male teachers asked in this study do not. Still, it may be that more female teachers do use social media, as the table suggests. Several of the informants use Facebook as a place where they give information to the pupils. In addition, pupils can share homework and messages there. Facebook plays the role of the Learning Management System, which is supposed to be used for messages and homework among other things. A respondent says:

Most of the classes I teach have a class Facebook group, which is used to post reminders to pupils about work, future tests etc. It's not specifically used for teaching, but as a way of keeping in touch with pupils. This is often where they choose to ask questions – almost none of them use It's Learning to send messages.

Several of the teachers in the study use Facebook for similar purposes like this. A reason can be that they use a platform where all the pupils are several times a day, and will reach all their pupils more effectively than posting the messages in the LMS. When considering Prensky's (2001) digital natives and immigrants, discussed in section 2.8.4, this may be a way for the immigrants to enter the sphere of the natives in a positive way. When using something they are familiar with in school, it gives a positive impression of the teachers meeting the pupils where they are, which might motivate the pupils in a good way.

When looking at the wide range of tools the respondents have stated they use, it would according to the Ludvigsen committee's definition seem that they have a high level of ICT competence, as ICT competence has to do with the use of digital tools and technology. Maybe it is the Information and Media Competence Norwegian teachers lack, as this has to do with how one uses technology, as well as learning about technology and media (NOU,2015). When using all these tools, they will develop digital competence, if we are to believe the *Framework for basic skills*, that emphasises that digital tools are a necessity to acquire digital competence (2012) something that is also supported by Kjell Lars Berge (2007) when saying that digital competence has to be acquired. It is obvious in this study that digital tools are there, and are being used, though some still might feel that the digital competence has not yet been fully required. Vygotsky's thoughts from section 2.4 are also relevant in this setting. The teachers need to be able to help pupils use digital tools as artefacts (Lantolf and Thorne, 2006) , as it is a more modern way of reaching many of the aims in the curriculum, or different learning goals within the different themes in the English subject. Using a modern digital tool, can make the act of learning easier and faster, as well as make the road to knowledge shorter.

The teachers who have participated in this study make use of a wide range of digital tools, and a few differences can be detected between the sexes. These differences are especially visible when it comes to the use of NDLA, YouTube and Social Media. Those who have higher digital skills, or competence, will use a wider range of digital tools. These findings do help answer the research question, and strengthen the study's hypothesis that there is a great variety when it comes to which, and how, digital tools are being used.

4.4.4 Category 4 – View on the PC scheme as positive or negative. What are the challenges?

When the PC scheme was introduced, it changed the work-environment not only for the pupils, but for the teachers as well. Up to this point, two or three students in a class insisted on using their computers, but most pupils still used pen and paper. Some handed in their work electronically, some not. When it was decided that all pupils should have a computer to use in school, they would all be able to take notes electronically. The teacher no longer had to wait before moving on because one or two pupils are slow writers by hand. Still, would the positives outweigh the negatives? That was what this question sought to answer. It was also interesting to find out what the teachers see as the biggest challenges. Category 4 includes the answers from questions 8 and 13 in the interview.

Table 4.6 View of the PC-scheme as positive or negative.

View on the PC scheme				
BOTH	POSITIVE	NEGATIVE	NOT SURE	NOT RELEVANT
Overall:				
14	29	1	3	1
Females:				
10	24	1	1	1
Males:				
4	5	0	2	0

Those answering ‘Not sure’ or ‘Not relevant’ are those teachers who did not work as teachers before the PC-scheme was introduced. Other than that, we see that 29 out of 48 teachers see the PC-scheme as a positive thing. In addition, a significant number says they see it as both positive and negative. Only one see the PC-scheme as something negative. It is interesting to look at this in connection with what was presented in section 2.8.3, about Professional Digital Competence. According to Johannesen, Øgrim and Giæver (2014) in their article *Notion in Motion: Teachers’ Digital Competence*, there is a public view that the digital skills of Norwegian teachers are limited. This lack of belief in the teachers’ Professional Digital Competence, together with the fact that there is no proper training provided, could result in the fact that teachers develop a more negative attitude towards digital tools and digital competence.

When it comes to the challenges the teachers have met, quite a few are listed. A big problem seems to be that it is harder for the pupils to stay focused. When a pupil has a laptop in front of him/her it is easy to hide behind their screens, drifting away into the internet, and not always pay attention to what is going on in the front of the classroom. In a teacher's competition with the internet for the pupils' attention, the internet unfortunately wins too many of the times, making the teachers having to repeat themselves more, as they do not have the pupils' full attention all the time. This has led to some teachers having had to limit the pupils' access to social media in particular and the internet in general. Something that complicates it even more, making it extra challenging, is that it is the weakest pupils who are easiest distracted. Those who so desperately need to pay attention, are those who disappear behind their screens.

A tool the pupils have gained access to through their laptops are online translators like Google Translate. For the pupils the online translators are more easily accessible than the good old dictionary, and it is quicker to translate words and sentences online. The problem is that these online translators do not hold a high quality, which affects the pupils' language negatively. Another challenge is that pupils 'cut and paste' from the internet. When they find sources, they just copy it into their own texts, instead of processing it, making it their own. This, and general plagiarism have been, and still are, challenging. Fortunately, there are tools developed to help teachers scan texts for plagiarism.

For many it is a challenge that there are technical problems with the digital tools. PCs will not work, active boards will not start, or have lost internet access, and documents go missing and so on. These things take time away from teaching, as a teacher does not feel confident, or have the right competence, to figure out the technical problems. Thus, one will need help from the person responsible for ICT in the school, or from the pupils, who often have a higher competence than many teachers. This is also something the respondents mention. They see it as challenging that pupils have a higher digital competence than they do. In this situation teachers do not feel confident enough. The teachers, who in these situations are the digital immigrants, have problems adapting to the digital natives' way of thinking. The pupils have their own way of speaking, working and thinking digitally, that the immigrants not yet possess. This is, as noted in section 2.8.4, one of the problems in today's school according to Prensky (2001).

The challenges mentioned are also recognised in the study of Hatlevik et.al (2012) where it is stated that though teachers do see the benefits and the positive sides of the use of the internet, there are challenges like noise and using the internet for unintended purposes.

As a conclusion, many pupils cannot resist the many temptations of the internet. They drift away, and are lost behind their screens. It is also a challenge to help the pupils become critical to the sources they find online. Technical problems are the backside of the PC scheme. In a class of 30, there is always someone's computer that does not work, or there are problems with the smartboard, or some other digital device used in class. An interesting question is if the computers are such a big threat as some make them out to be. Maybe is it the teachers who have to adapt to this new way, and find ways to solve the problems they see, as the computers have come to stay.

What is seen as challenging can be seen to correlate with the digital competence of the teacher. A teacher who is confident in his or her use of digital tools in class will most likely see fewer challenges, as they have a better understanding of the tools pupils use. Maybe the pupils will have less ability to exploit a teacher of higher competence, as it will be easier to be caught? Again the difference in competence is what it comes down to.

4.4.5 Category 5 – The PC versus the Textbook

This category looks at the results from questions 9 and 10 in the interview. Today there are many tools on the internet developed to help us teach. Earlier the textbook has been the teacher's guide, and it has been an important part of teaching. The textbook writers have used, and still use, the curriculum when writing the books, and it is up to the teacher to use the book, or find material to meet the demands in the curriculum for example on the internet. There are already plenty of e-books out there, and, as mentioned, there was an idea when introducing NDLA that the goal was that we no longer needed physical books in upper secondary school, but could use the internet instead. Huge amounts of money would be saved if this was to become a reality. Still, years after the introduction of NDLA, the books are still present in the Norwegian upper secondary schools, and NDLA serves as a supplement.

Table 4.7 Do you use the textbook as much as before the PC-scheme was introduced?

Do you use the textbook as much as before the PC scheme was introduced?		
Overall		
YES	NO	NOT RELEVANT
19	22	7
Females		
14	17	5
Males		
5	5	2

Table 4.7.1 According to age, overall

According to age, overall			
	YES	NO	NOT RELEVANT
25-35	4	4	3
36-45	5	5	3
46-55	3	9	1
56-67	7	4	0

Table 4.7.2 According to age, females

According to age, females			
	YES	NO	NOT RELEVANT
25-35	3	2	1
36-45	5	5	3
46-55	2	8	1
56-67	4	2	0

Table 4.7.3 According to age, males

According to age, males			
	YES	NO	NOT RELEVANT
25-35	1	2	2
36-45			
46-55	1	1	0
56-67	3	2	0

As can be read from table 4.7, 7 of the 48 informants answered ‘Not relevant’. These informants have not worked as teachers before the PC-scheme was introduced, and are therefore not capable of making that comparison. It is interesting to see that as many as 19 of the informants say that they do use the textbook as much. If one looks deeper into the numbers, what stands out is that when it comes to teachers aged 46-55, nine out of 13 say they do not use the textbook as much as before. Eight of these are female teachers. Also, seven out of eleven teachers aged 56-67 say they do. It seems that the teachers aged 56-67 are the ones holding on to the book. ‘Old habits die hard’!

That only 13 out of 48 use NDLA may be seen as a problem, as NDLA, as mentioned, is an expensive tool intended to take over the role of the textbook. The idea was that digital resources had the ability to be continuously updated, in opposition to the textbook. It was an intention that digital resources should be the foundation in the Norwegian upper secondary schools, not because it was economically beneficiary, but pedagogically more sensible. (Danbolt 2010). It is obvious that teachers are not ready for giving up the textbook, as more teachers use the textbook’s digital resources than NDLA.

When asked if he/she uses the textbook as much now, as before the PC-scheme, a respondent answers: *Yes, I do. I feel that the textbook is a safe, physical object, both for pupils and teachers. And in an age where budget-cuts are frequent and there is a gradual switch to digital means, I feel the textbook is even more important as a basis for what I do.* This is in line with what is discussed in section 1.1, where pupils of teachers who use digital tools very much, say they miss reading in the textbook and preparing for tests using the textbook. As the respondent says, the textbook is something physical, something we can hold in our hands. Maybe both teachers and pupils still need the physical object that the textbook is, and not just screen based texts and tasks. According to Juuhl, Hontvedt and Skjelbred (2010), in their

article *Educational Resources Research after the LK06* (Læremiddelforskning etter LK06), not much research has been carried out when it comes to the comparative studies between digital and printed teaching resources. It is a complex area of study, which may be the reason for the low number of studies. The article concludes that the interaction between digital tools and printed resources is up to the individual teacher, as well as the publisher who develops the textbooks, and the digital resources to go with them. The writers emphasize the importance of interaction between the resources being more useful than comparing them. The same article concludes that studies show that the dominating resource after the LK06, still is the textbook.

When looking into the second part of the category, there are quite a few tasks where the teachers choose to use the PC instead of the textbook. Not all, but most. *I still use the textbook as the main source in my teaching...* a male teacher aged 58 states. Some feel more confident when using the book. As discussed in the previous paragraph, the textbook is something we know, something we feel safe with. The internet is newer, and for many, still quite unknown. Most teachers see many new possibilities using the internet in the English classroom. The internet is used for grammar tasks, where the pupils will solve tasks online, often using interactive programs. The tasks are corrected automatically, and is time-saving for the teacher, as the pupils go through their tasks in their individual pace, and the teacher does not have to go through the correct answers in class. Another benefit is the access to audio- and video files from for example YouTube. Film, film-clips and music are easily accessible online, and gives the teacher more options than only the written text in the book. The textbooks are not always updated, as they might be a few years old. Textbooks are expensive, and the school owners cannot afford to have the newest versions of the books at all times. Therefore teachers and pupils use the internet to find updated information about themes they work with in English. The internet is not just filled with updated information, but also much more information than what will be found in the book. In addition, the internet is used to read updated news, and for interactive vocabulary tasks. Some even use the internet for reading tasks, and hardly use the textbook at all. The most welcoming, and positive thing for the school-owners is that all this information, and these tools which the teachers and pupils use online, can be accessed cost free. A challenge many of the teachers mention though, is the pupils' ability to be critical of the information they find.

Through the discussion of this category, it is evident that teachers are of course different, as most people are. In this category, one can see that there is a variety when it comes to both age and sex. Interestingly, without being generalising, teachers aged 56-67 have the highest

number of teachers who still stick to the textbook. The number is still low though, showing that also the teachers representing the highest age group make use of digital tools.

4.4.6 Category 6 – Social Media

Talking about the use of social media over lunch, can be like throwing a fire-torch on the table. While some teachers embrace the ability to use social media when teaching, thinking it is a factor of motivation for the pupils, others see it as nothing but an evil distraction, poisoning the minds of the pupils, and that they should be banned from using it when in school. Where some see opportunities, others only see problems. A reason can be that a number of teachers do not have the same knowledge about social media as the students, and may therefore feel insecure about it. Still, almost 30% of the teachers asked, say they do use Social Media in the classroom, and interestingly enough, they are all female! Category 6 deals with the answers from question 11 in the interview.

Table 4.8 Do you use social media in the English Classroom?

Do you use social media in the English Classroom?	
Overall	
YES	14
NO	34
Females	
YES	14
NO	22
Males	
YES	0
NO	12

Table 4.8.1 Use of Social Media in the classroom, according to age, females

According to age, females		
Age	YES	NO
25-35	3	2
36-45	7	6
46-55	3	6
56-67	1	5

Again, the low number of male informants in the study cannot really say something about male teachers' use of social media in the English classroom. Still it is interesting that none of the 12 male teachers use any form of Social Media in the classroom, especially as five of them are aged 25-35. When looking at the female teachers, the teachers who use Social Media the most are those aged 36-45. Maybe is social media used just as frequently by the older groups, than the younger ones?

Question 11 had a follow-up question where it asked those informants who said 'no', to state which social media they were familiar with and use/have used, as a private person. The informants mention they are familiar with, and some use, media like Facebook, Twitter, Instagram, Snapchat and blogs. A conclusion here can be that those teachers who do not use social media in the classroom, do not use it because they do not know how to, but because they have made a choice not to use it when teaching. From the interviews, one can also see that many of those who do not use social media in the classroom do not use it privately either, because they might not be familiar with it. Alternatively, they do not see that social media are of any use when teaching. Maybe is social media where we find the biggest difference between pupils and teachers? Pupils use social media more than most teachers do and social media is one of those distractions that take the pupils' attention away from the teacher. That is a probable reason why many teachers are negative to social media. It is easy to dislike something with which one is not familiar.

From the answers it shows that some uses Facebook as a tool where they give messages and homework, where the social media serves the purpose of the school's LMS (Learning management system). This was addressed in section 4.4.3.

4.4.7 Category 7 – Learning Platforms

The two platforms used by the teachers in this study, *Fronter* and *It's Learning*, give the teachers many new opportunities when it comes to hand-ins, tests, assessment, and more. For the pupils it is a place where they can store everything from handouts to assignments and tests, so that it does not disappear in their bags or lockers. Question 12 in the interview asked the informants about how they used the learning platform in their English teaching.

If your school uses a learning platform, (ex Fronter, It's Learning), how do you use this in your English teaching?

Table 4.9 Use of Learning platforms

Handing in assignments	38
Posting plans	18
Giving feedback	6
Questionnaires/quizzes	6
Tracking grades	6
Tests	16
Giving information	24
Giving homework	11
Presentations	4
Surveys	3
Links	11
Communicate	8
Evaluation	3
Publish documents	6
Oral assignments	2
Archive	5

Mostly, teachers use the platforms for students handing in assignments, and for giving information. Still, as one can read from the list, there are many possibilities when it comes to the platforms. There are obviously differences between the two platforms used, and in the interviews there are a couple of teachers who say they wish their school would use *It's Learning* instead of *Fronter*, as it is (according to them) a platform with more possibilities. After reading the answers to the interviews, it does look like *It's Learning* has a higher range of possibilities than its counterpart does. A thing that can be of importance though, is if the teachers receive proper training in using the platforms. Just because we do not use something, does not mean it is not necessarily there. Maybe teachers need to take time, or be given the time, to get to know the platforms, or get more training. In addition, the use of 'easier accessible' platforms like Facebook (see section 4.4.3 and 4.4.6) lower the use of, and activity in, the learning platforms. It is obvious that these systems do not serve the pedagogical purpose that was intended in the report given after the project tied to the use of learning management systems in 2006. (2006). When pupils, and some teachers, find it easier to use

social media instead of the LMS, for some of the tasks intended for the LMS, it might be a sign that they have to make it easier to access and more user friendly. A female respondent aged 63 wrote; *I give assignments via Fronter, is all. I text my students via my mobile phone if necessary (I know this is ridiculous, but I find it practical)*. This strengthens the idea that it might not be user friendly, and easy accessible. Others state that the LMS I used mainly as an administrative tool, and that it has a limited pedagogical value. As a conclusion, I think it is important to see a connection between the training teachers are given in using the LMSs and how they use it. Another important aspect is that if the teachers do not use it, the pupils will know, and they will prefer other arenas for the same purposes, like Facebook. An important message to communicate to It's Learning, who also is the owner of Fronter, is that the platform has to be easy accessible for the pupils and teachers to use it. In addition, an important tool like this will need proper training. When looking at the answers, there are so many tasks where the platforms can be used, but are not. Most likely, the reason is that the teachers are not aware of them.

4.4.8 Category 8 – the employer

The last category addresses the two last questions in the interview, questions 14 and 15.

Question 14 asks if the employer has given any form of education/training when it comes to digital tools.

Table 4.10 Has your employer given any form of education when it comes to digital tools?

YES	35	73%
NO	13	27%

As one can read from table 4.10, almost three quarters of the informants say they have received training. Some who have answered confirmatively about receiving training have added that there has been very little training provided, or that the training has been only elementary, for beginners. In addition, some say the training has been very limited, continuing that it is not something the employers spend much time on. One interesting fact that several teachers mention, is that the training provided, is provided by those colleagues that are more digital active. A 62 year old teacher and counsellor states that *Yes. We have courses at school where my digital active teachers teach those of us who are not quite up to it*. It seems it is a common practice that teachers with a higher level of digital competence are used to teach

those with lower competence. This is strengthened by other comments like *Not very much! Most of it I have learned from colleagues or my students* and *Yes, we can attend course so that we can learn. This is normally held by colleagues that use this all the time and are good at it*. It is interesting that pupils teach teachers. Again, Prensky's (2001) digital natives and immigrants become important in the discussion.

Some teachers do say they have received training, but that it is a long time ago. *More than 20 years ago* and *The school arranged several workshops in those 'early' years (around 2008)* are a couple of quotes from the interviews. Maybe the schools and the counties had a bigger focus on it earlier, when the pupils first started using the laptops in school? In the more recent years it looks like the practice for many employers is to hope that the teachers gain the digital training on their own, or learn from others. In a time where budgets are tight, I guess schools want to spend their money on what they see as more important tasks. Do the employers fail to understand that a course given twenty, or even five years ago, may be useless today? Do they not understand that their teachers will need proper knowledge to make sure that the pupils reach the aims in the national curriculum? One can definitely witness a lack of the maturity discussed by Erstad and Hauge (2011) in section 2.8.3. If the schools are not digital competent, the teachers of the school will not be digital competent, and will not develop digital competent pupils. Johannesen, Øgrim and Giæver (2014) argue that the school is obliged to develop the digital skills pupils will need. One can ask why more schools do not offer formal digital training for their teachers? The teachers will then be able to help the pupils reach the goals of the national curriculum, which should be the main goal of any school and any county.

The training some schools do offer it seems is in the school's own administrative programs. *Yes, but it is mostly on programs that are necessary to register absence/grades etc.* The school offers training so that the teachers can fulfil their role and aims as an employer. What about their role as an educator? Some leave the teachers to manage on their own, *even with new technology* as one of the respondents says. Administrative tools are of course important, as is the fact that the teachers know how to use them. I think what the teachers miss, is support from their employers to gain the necessary digital competence to feel confident in their work with pupils that today have a higher level of understanding about digital tools than many of their educators.

From the interviews it is difficult to see a pattern. One cannot see that one particular county stands out. It is obvious that there are different practices in the different schools within the counties.

When reading through the comments it seems that digital tools are not something the schools, or the counties, spend much time or money on. It is left up to the teachers to teach each other, or to find out about digital tools themselves. Considering that digital tools, and digital literacy is more important today, and is part of the basic skills, one should think that the employer would offer more training, so that the teachers can provide what the students are entitled to.

Table 4.10.1 Has your employer given any form of education/training when it comes to digital tools? Countywise.

County	YES	NO
Akershus	1	
Buskerud	4	
Finnmark	1	1
Hedmark	1	2
Hordaland	5	
Møre og Romsdal	2	
Nordland	3	1
Nord-Trøndelag	1	1
Oppland	3	
Rogaland	3	1
Sogn og Fjordane	1	2
Sør-Trøndelag	3	
Telemark	3	
Troms		2
Vest-Agder	2	1
Vestfold	1	
Oslo	2	
Østfold	1	

Table 4.10.1 shows the answers to question 14 county wise. Though it seems that providing digital training seems to be up to the schools within the county, one can argue that this is wrong. When a teacher is employed in a county, working in an upper secondary school, it should not be dependent on which school one works in, how much training one will receive. Still, this is the case, and this is what is recognised by Erstad and Hauge (2011) when talking about digital competent schools (see section 2.8.3). The problem is also addressed by the Ludvigsen committee, in the Norwegian Official Report 2015, which says that there is too much variation between the schools when it comes to the implementation of digital tools (2015). To make this problem go away, and make the teacher of the Norwegian upper secondary schools more confident in their use of digital tools, the schools and the counties have to provide modern up-to-date training.

Question 15 in the interview deals with the expectations the employer has to its teachers when it comes to digital tools.

Table 4.11 Does your employer have any expectations to you as an English-teacher when it comes to the use of digital tools?

YES	25	56%
NO	20	35%
UNSURE	3	9%

As one can read from table 4.11 25 teachers answered that, yes, their employer has expectations to them. 20 says the employer do not have any expectations, whereas three informants were unsure. As is the case with question 14, there are teachers within the same county that have given different answers, and below follows a table of the answers according to counties, and the answers of those informants within the same county who answered differently.

Table 4.11.1 Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? Countywise.

COUNTY	YES	NO	UNSURE
Akershus	1		
Buskerud	3		1
Finnmark	2		
Hedmark		1	2
Hordaland	4	1	
Møre og Romsdal	1	1	
Nordland	3	1	
Nord Trøndelag		2	
Oppland	1	2	
Oslo	1	1	
Rogaland	1	3	
Sogn og Fjordane	1	2	
Sør Trøndelag	1	2	
Telemark	3		
Troms	1	1	
Vest Agder	1	2	
Vestfold		1	
Østfold	1		

Below follows the answers of those teachers representing the counties of Vest-Agder, Troms, Sør-Trøndelag, Sogn & Fjordane, Rogaland, Oslo, Oppland, Nordland, Møre & Romsdal, Hordaland and Buskerud. These counties represent the respondents giving conflicting answers if one assumed there was one set practice within a county. It seems evident though, that there is no set practice. It is up to the schools how they deal with their teachers when it comes to digital competence. This is one of the challenges recognised in Hetland and Solum's report, saying that the difference in practices between the schools when it comes to ICT is challenging (2008).

Buskerud:

F47 *Yes*

M51 *Yes*

F36 *Quite possibly. But these expectations are not made clear to the employees.*

F49 *Yes. I have attached a file which shows what my school expects of our teachers.*

In the county of Buskerud three out of four answer that the employer does have expectations to them when it comes to digital tools. One respondent disagrees. She is most likely employed in a school where they do not have as clear expectations, or have not succeeded in communicating their expectations to their staff.

Hordaland:

F43 *Yes. They see the use of digital tools as a basic skill that all students should master.*

F40 *Yes*

F43 *Nothing. Apart from the expectation that I help fulfil the aim that the students should be computer literate in all subjects.*

F52 *Yes. Since there has been quite a lot of focus on training and practicing, I think it is expected we use digital tools and also because it is written in the curriculum that students should be taught it.*

M35 *Yes. They expect us to integrate it into all our subjects.*

In the county of Hordaland the different practices are clear, as some schools obviously have a clear expectation to their teacher when it comes to using digital tools when teaching. One respondent represents a school where the expectations are not that clear. When looking closer at the interviews, those answering confirmative that the employer have expectations to them, have also answered that their employer has provided training. At least to some extent.

Møre & Romsdal

M47 *Yes. As Fronter, Skolearena and Outlook have to be mastered in order for you to function properly in the school as a teacher.*

F42 *My employer believe I know my students best and therefore know best which methods will work with whom.*

Skolearena is an administrative tool only, and cannot be used when teaching. Fronter, has a lot of functions, especially when it comes to giving information, administrating hand-ins and texts. Fronter, is also more of an administrative tool, unless you can create tasks and quizzes of some sort. When teaching English, there are other tools that are more important, and useful. The county of Møre & Romsdal, or the schools of the two respondents seem to have no clear expectations when it comes to digital tools used in teaching English.

Nordland

M64 *Yes. We are encouraged to use digital tools as much as possible.*

F26 *Yes. Our school has decided to focus on digital learning. E.g. I held a training course in digital storyline.*

F45 *I think the only expectation is that I use It's Learning.*

F59 *Yes. Both in my virtual classes at Ni Nans face-to-face at my xxxxxxx Vgs. (anonymised by researcher).*

In the county of Nordland the respondents are divided 50/50 in their answers. What is good to see, is that the employers that have clear expectations to their teachers' use of digital tools, also have provided training.

Oppland

F53 *Yes, of course. And I cope...But it's not my job to be a multi-talent when it comes to giving students a "show" by using digital tools. There has to be a purpose to what I do.*

F64 *None specific.*

M58 *The expectations are not particularly linked to the use of digital tools, more my teaching in general.*

The respondents from the county of Oppland are divided in their answers, as they probably represent different schools. ...*it's not my job to be a multi-talent when it comes to giving students a 'show' by using digital tools.....* It is clear that teachers are of different opinions when it comes to the use of digital tools when teaching. Where some see it as a positive supplement to their teaching, others see it as an unnecessary evil. This will also affect the pupils. Some may never experience learning English through exciting interactive programs, but may be left using only the textbook.

Oslo

F63 *Of course. But we are lucky enough to be trusted to teach properly, and there are no check-ups. We are treated as the professionals we are. I have 5 years of study in one subject alone.*

F33 *No special expectations I think.*

An interesting factor that comes up in the answers from Oslo, is that of trust. ...*we are lucky enough to be trusted to teach properly, and there are no check-ups.* That leaves me thinking about the professional digital competence addressed in section 2.8.3, and the digital maturity of the school. An interesting question is; who would do the check-ups? Does the school have a digital competent administration to oversee the digital competence of the teachers?

Rogaland

F40 *Not that is expressed in any guidelines. It is more the effort of individual teachers on staff that highlights this.*

M31 *We are expected to use them.*

F46 *I feel quite free to use what tool I want.*

F49 *No not really. There are no specific requirements regarding how we use digital tools in the classroom. That doesn't mean to say it will stay that way. It might suddenly become very important again.*

In the county of Rogaland there are no set expectations. The respondents probably represent different schools, but one is left with the impression that there is just a vague interest from the employers when it comes to digital tools.

Sogn & Fjordane

F40 *Not that I know*

F43 *Expectations of using NDLA and FYR-resources and the tools we have at school plus the digital platforms of the textbooks.*

F46 *Not specifically as an Englishteacher, no.*

The county of Sogn & Fjordane is, according to this study, the only one that has expectations to their teachers when it comes to the use of NDLA. The respondents are clearly from different

schools within the county, and it is clear that Sogn and Fjordane have no set common practice that all schools have to stick to. As seems to be the practice in most, if not all counties, it is entirely up to the schools.

Sør-Trøndelag

F62 *Yes. Our leaders want is to be up-to-date.*

F53 *We are expected to keep up to date, but are free to use our own methods, as long as we stick to the curriculum.*

F46 *Expect to make the teaching best suited for the students – with or without digital tools. What is best for the individual.*

The county of Sør-Trøndelag, or the schools within it, wants their teachers to keep up-to-date. An interesting observation though, is that the employer who expects their employees to be up-to-date, provided training more than 20 years ago, and have only given few courses after that. For a teacher to keep up-to-date, courses have to be up-to-date. Digital tools change and develop all the time, and they become outdated fast, as the development in the area is so rapidly changing.

Troms

F33 *I feel a pressure in terms of keeping updated , but there are no resources used on seminars and courses to increase our competence.*

M31 *I guess. It's a curricular aim and focus area, but nothing out of the ordinary has been stated.*

In Troms county it seems to be something of the same attitude towards it as in many of the previous counties discussed. According to the respondents from Troms, no special training has been provided, and it seems there are no set expectations.

Vest-Agder

F42 *No particular expectations but it is kind of expected that we use digital tools.*

F61 We have to use digital tools, I can't see how it is possible to work as a teacher without doing so. The PC is our main teaching tool today.

M34 Not much, but we are expected to use the platforms used by the school such as It's Learning and Skolearena. It is considered a to be positive if we use digital technology in the classroom, but we don't have to. Some of my colleagues are still stuck in the 90s- The pupils are always positive to new technology in the classroom.

In Vest-Agder there seems to be some expectations, still the schools do not seem to offer updated training. It is interesting what the last respondent says about some of his colleagues being stuck in the 90s. Research on the subject shows that the goals set for implementing digital tools into the Norwegian school has failed. The study of Thomas Arnesen (2010) draw this conclusion, and when looking at Arnesen's conclusion in context with this respondent's quote, it is obvious that not only the teachers are stuck in the 90s: It seems the plans of ICT in the Norwegian schools system, that started in the late 80s, are also stuck somewhere on the way.

Having analysed all the data, a valid conclusion would be that all the hypothesis given in the introduction seem to be correct. In chapter 4, one can clearly see that there is a big difference when it comes to the digital competence of English-teachers. Even if many respondents have answered as teachers in general, more than English teachers specifically, the result remains the same. In addition, the chapter shows that there is a great variety when it comes to which, and how, digital tools are being used. The study reveals that there is a wide range of digital tools being used in the English classroom in the Norwegian upper secondary school. There is also a variety in how teachers use the different tools. There is most definitely a variety between the different counties (school owners) as to what they provide of training, and what expectations they have to the teachers' use of digital tools, as also was one of the study's hypotheses. Through the interviews one learns that there is no set practices in the counties. The counties own the school, but make no superior decisions about how the schools, or the teachers use, or do not use, digital tools. There seems to be no interference from the county when it comes to either digital competence, skills or tools. Therefore, there is not only a variety between the different counties, but also between the different upper secondary schools within a county. As mentioned in the discussion, this is maybe one of the biggest challenges, that there are no set practices. No one knows what is going on at the next school, or even in the next-door classroom. Teachers need more training in how to use the most modern tools,

and maybe it would benefit both the pupils and the teachers if there is a system to assess the pupils' digital competence when they leave school, as is the case with the other basic skills.

Chapter 5: Conclusion

The purpose of this study has been to find out if there are differences between the teachers in the upper secondary English classroom when it comes to the use of digital tools. Further, through the study, the employer's expectations to the teachers has been investigated, together with finding out if the employer provide sufficient digital training. The questions have been answered through material from a 15 question digital e-mail interview, containing the answers of the study's 48 respondents. The answers were analysed, and divided into eight categories, which were discussed according to the presented theory in chapter 2, and the research question and hypotheses presented in chapter 1.

5.1 Research Question

How do teachers' use of digital tools vary according to age, sex and geographical affiliation? The study's research question sought to find out the differences between the teachers when it comes to what kind of digital tools they use. This was done through looking at how the teachers' teaching of English has changed after the introduction of the pupil-PC into the classroom. Also the interview asked the respondents to list the tools they use, how they used some of them, and if they still use the textbook as much as before. Within the eight categories developed, one could see differences in certain categories when it came to the age of the teachers, and the sex of the teachers. Through the tables, we see that there are differences when it comes to age and sex, especially when it comes to how the teachers view their own level of skills. A higher percentage of male teachers see their digital skills as above average, though the female percentage is not far behind. Being digital is not something that more men are interested in today, as just as many women have to use digital tools in their daily life, both privately and at work. When it comes to the geographical affiliation this had mainly to do with the employer. The study shows that there is a great variety between the counties, and the schools within the counties, when it comes to what they provide of digital training, and the expectations they have to their teachers when it comes to the use of digital tools in teaching. Mostly, the expectation has to do with the use of digital administrative tools.

It seems that the majority of the teachers in the study feel confident in using digital tools in the English classroom, but there are evidence in the interviews that that is not the case for all, and that there is a lack of formal training. A major conclusion to be drawn from the present

study is that both EFL teachers and learners would benefit from a common practice as regards formal training.

5.2 Hypotheses

The study introduced three hypotheses that said something about the impression of the researcher when it came to certain areas concerning the use of digital tools, and the digital competence of Norwegian upper secondary teachers of English language.

1. There is a big difference when it comes to the digital competence of English-teachers.

The study shows that there certainly are differences, though they may not be as big as initially believed. Most teachers in the study see their digital competence as average or above. Of course, it is difficult to say what is average and above, and the study shows that teachers do feel inferior to the pupils when it comes to digital tools, and digital competence. The pupils of today are high consumers of digital equipment, and use digital tools more in their spare time than most of their teachers. It becomes clear through the study that there is a need for some kind of formal training, so that the teachers can feel more confident in using digital tools in the classroom.

2. There is a great variety when it comes to which, and how, digital tools are being used.

Some teachers seem to have a higher digital competence as they use a wider range of digital tools, and see the use of them in teaching situations. On the other hand, some still prefer to use the textbook as much as possible, and use only the digital tools they are expected to use. Using digital tools is among the basic skills in the Norwegian national curriculum. Taking this into consideration, the difference in tools pupils are exposed to in the learning of English is too big. As the difference in digital competence between the teachers is so big, the result will be that some pupils leave upper secondary having used a wide range of digital tools, while others have only used the PC as a writing tool. Considering that this is a basic skill, all pupils should be exposed to digital tools in the English classroom, it should not depend on what teacher the pupils have had.

3. There is a variety between the different counties (school owners) as to what they provide of courses, and what expectations they have to the teachers' use of digital tools.

The study shows that there is variation between the different counties when it comes to providing formal training or courses in digital tools. Many of the counties have provided training, but it seems that not a lot of money is being spent on this. The training provided seems to be of an older date, not being compatible with the fact that digital tools are in a constant development, and that there will be a constant need for the teachers to update themselves. The interviews show evidence of a common practice that digital competent teachers give courses or training to those who have a lower competence. This is probably both time- and money saving for the employer. The question is if it is a good enough practice for the teachers. The last two questions, about the employer, some of the teachers' answers came in conflict with teachers from the same counties. Taking a closer look at the answers from these counties, it became evident that there are no set practices in the counties. It is up to each school how they deal with the teachers' digital competence, or the lack of it. The remaining question will then be if teachers ever will be able to lift the pupils' digital competence, when there are no common guidelines of what their own digital competence should be.

5.3 Concluding remarks

In Norway there has been a plan of how to implement ICT into the school subjects since the end of the 80s. Today, almost 30 years later, it seems that the plan has still not been fulfilled. In the 80s, only the most enthusiastic teachers used ICT in their teaching. In the 21st century, however, all teachers have to use it. Today, the most enthusiastic teachers are those who have no problems using digital tools in their teaching, and use a wide range of tools, making their teaching more up-to-date and modern- at least in the eyes of the pupils. The rest of the teachers tag along, trying to keep their head above water, and keep up with the never-ending digital development. It seems that the PC, and other digital tools have become an overall common thing, that it is expected that a teacher already knows when entering teacher training, and later the teacher profession. That is in line with how many of the teachers in study feels, that it is left up to themselves to keep updated. Maybe is it just as well, considering that it has taken 30 years, and there is still no set practice in Norway when it comes to the digital training of teachers? This brings me back to the quote on page 2. *It is better to be a master of a few things than a Jack of all Trades!* (Female teacher, 50 years old). This female teacher so conveniently said that it can all be a bit confusing. It is enough to focus on a few digital tools at the time. To become good users of some tools, and use them, instead of an under average

user in too many. I think this sums up how many of the teachers think when it comes to the use of digital tools in the English classroom.

5.4 Recommendations for further research

Firstly, it would have been interesting to expand the number of informants. A higher number of informants would give the researcher a more complete picture. In addition, if the higher number of informants were more equally divided between the sexes, it would give a better signal on any differences between them.

Further, the counties could have been investigated further. To gain insight into their documents when it comes to digital competence and the use of digital tools, would give a clear picture on their priorities. In addition, it would be interesting to look closer at the schools represented in the study.

I think it would be worth taking a closer look at the teacher training in Norway, if it would be advantageous that digital competence was implemented into the different levels of teacher training, or if digital competence should be something the private market offered courses in, which had to be included in a teacher's overall skills.

As it is today, with no set practices or expectations, the differences are too big. The extent a pupil has been exposed to digital tools in the English classroom, depends on which county the pupil lives in, which school the pupil goes to, and which teacher the pupil has had. I think it is safe to conclude that that is not satisfactory when it comes to a basic skill.

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Appendix 1 Approval from the NSD

Norsk samfunnsvitenskapelig datatjeneste AS
NORWEGIAN SOCIAL SCIENCE DATA SERVICES

NSD

Aud Solbjørg Skulstad
Institutt for fremmedspråk Universitetet i Bergen
Sydneplassen 7
5007 BERGEN

Vår dato: 30.10.2014 Vår ref: 40439 / 3 / KH Deres dato: Deres ref:

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TILBAKEMELDING PÅ MELDING OM BEHANDLING AV PERSONOPPLYSNINGER

Vi viser til melding om behandling av personopplysninger, mottatt 23.10.2014. Meldingen gjelder prosjektet:

40439	<i>The digital Space in the English Upper Secondary Classroom</i>
Behandlingsansvarlig	Universitetet i Bergen, ved institusjonens øverste leder
Daglig ansvarlig	Aud Solbjørg Skulstad
Student	Eva Fredriksen

Personvernombudet har vurdert prosjektet og finner at behandlingen av personopplysninger er meldepliktig i henhold til personopplysningsloven § 31. Behandlingen tilfredsstiller kravene i personopplysningsloven.

Personvernombudets vurdering forutsetter at prosjektet gjennomføres i tråd med opplysningene gitt i meldeskjemaet, korrespondanse med ombudet, ombudets kommentarer samt personopplysningsloven og helseregisterloven med forskrifter. Behandlingen av personopplysninger kan settes i gang.

Det gjøres oppmerksom på at det skal gis ny melding dersom behandlingen endres i forhold til de opplysninger som ligger til grunn for personvernombudets vurdering. Endringsmeldinger gis via et eget skjema, <http://www.nsd.uib.no/personvern/meldeplikt/skjema.html>. Det skal også gis melding etter tre år dersom prosjektet fortsatt pågår. Meldinger skal skje skriftlig til ombudet.

Personvernombudet har lagt ut opplysninger om prosjektet i en offentlig database, <http://pvo.nsd.no/prosjekt>.

Personvernombudet vil ved prosjektets avslutning, 15.05.2016, rette en henvendelse angående status for behandlingen av personopplysninger.

Vennlig hilsen

Katrine Utaaker Segadal

Kjersti Haugstvedt

Kontaktperson: Kjersti Haugstvedt tlf: 55 58 29 53
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Dokumentet er elektronisk produsert og godkjent ved NSDs rutiner for elektronisk godkjenning.

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Prosjektvurdering - Kommentar

Prosjektnr: 40439

Utvalget informeres skriftlig om prosjektet og samtykker til deltakelse. Informasjonsskrivet til utvalget er tilfredsstillende utformet forutsatt følgende endringer:

- sluttdato for prosjektet
- navn og kontaktopplysninger til veileder/daglig ansvarlig for prosjektet
- dersom e-post slettes etter at skjemaet er lagret vil det være upresist å opplyse at man kan "trekke seg når som helst", og formuleringen må presiseres

Revidert informasjonsskriv sendes personvernombudet@nsd.uib.no

Forventet prosjektslutt er 15.05.2016. Ifølge prosjektmeldingen skal innsamlede opplysninger da anonymiseres. Anonymisering innebærer å bearbeide datamaterialet slik at ingen enkeltpersoner kan gjenkjennes. Det gjøres ved å:

- slette direkte personopplysninger (som navn/koblingsnøkkel)
- slette/omskrive indirekte personopplysninger (identifiserende sammenstilling av bakgrunnsopplysninger som f.eks. bosted/arbeidssted, alder og kjønn)

Appendix 2 Letter to the schools

Hei.

I mitt arbeide med ein studie innan engelsk fagdidaktikk , håpar eg du kan ta deg tid til å vidarese denne e-posten, med vedlegg, til engelsklærarane på din skule.

På førehand tusen takk!

Mvh Eva Fredriksen

Appendix 3 Letter to the teachers

Kjære kollega og engelsklærer i vgo.

Eg heiter Eva Fredriksen, og er engelsklærer ved Høyanger Vidaregåande Skule i Sogn og Fjordane. Eg held på med ein erfaringsbasert master med fordjuping i engelsk ved Universitetet i Bergen, og har no starta arbeidet med sjølve masteroppgåva. Det er i denne forbindelse eg kontaktar deg , og håpar du har anledning å svare på spørsmåla mine, slik at eg best mogleg får belyst det emnet eg skriv om.

Masteroppgåva mi har arbeidstittelen : *The Digital Space in the English Classroom*, og er blant anna eit forsøk på å få eit oversyn over korleis digitale verktøy læraren nyttar i engelskundervisninga, og korleis dei nyttar dei. Oppgåva vil høyre inn under engelsk fagdidaktikk. Som lærarar opplevde vi ein ny kvardag etter innføringa av PC-ordninga, og det er denne kvardagen eg freistar å få eit innblikk i. Til no er det ikkje alt for mykje litteratur om emnet, og eg håpar du vil bidra til at mi oppgåve kan verte eit tilskot.

Eg vil ikkje under nokon omstende nytte meg av ditt namn i oppgåva, og eg vil etter å ha lagra skjemaet, slette e-posten. Skjemaet/intervjuet vil ikkje innehalde spørsmål som vil kunne identifisere deg. Eg vil og gjere oppmerksam på at deltaking er heilt frivillig, og at du når som helst kan trekkje deg.

Om du kunne tenkje deg å vere med, håpar eg du svarar på det vedlagte intervjuet. Det beste er om du skriv svara direkte inn i dokumentet, og returnerer det som vedlegg til meg. Det vil ikkje ta særleg lang tid å svare på spørsmåla. På førehand tusen takk for at du tok deg tid i ein allereie pressa lærartilværelse, og God Påske!

Om noko er uklart, ikkje nøl med å ta kontakt.

Appendix 4 Additional letter to the schools in Aust-Agder

Hei.

Grunnen til at eg kontaktar dere igjen angående denne studien er at det berre er Aust-Agder av fylka i Noreg eg ikkje har nokon svar frå. Eg håpar derfor at kanskje nokon av engelsklærarane no har betre tid, og kan svare på intervjuet.

Så i mitt arbeide med ein studie innan engelsk fagdidaktikk , håpar eg du kan ta deg tid til å vidaresende denne e-posten, med vedlegg, til engelsklærarane på din skule.

På førehand tusen takk, og God Påske!

Appendix 5 The digital interview

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
2. Please state for which county you work.
3. What kind of education do you have?
4. How long have you practiced as an English-teacher?
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
6. What is your level of skills when it comes to the use of digital tools*?
7. What kind of digital tools do you use when teaching English?
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
9. Do you use the textbook as much as before the PC-scheme was introduced?
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
14. Has your employer given any form of education/training when it comes to digital tools?
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Appendix 6 The interviews including answers.

Akershus, 1 interview:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. Female 60
2. Please state for which county you work. Akershus Fylke
3. What kind of education do you have? Bachelor degree in English with minor in Ped and a Bachelor degree in History with a minor in Scandinavian Studies and an Associate of Arts Degree from Minnesota State University.
4. How long have you practiced as an English-teacher? Since 1977
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. I have always used lesson plans and day plans, but the PC has made it easier to incorporate links direct in the classroom instead of only referring to material. I also correct everything digital- and all notices are on Its Learning. The Students have access to everything from evaluation to preparatory work.
6. What is your level of skills when it comes to the use of digital tools*? Very good
7. What kind of digital tools do you use when teaching English? Projector, Smart Board, Internet, Learning Platform,
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Both- it depends on the students maturity- there is a problem with concentration- very many distractions
9. Do you use the textbook as much as before the PC-scheme was introduced? Yes
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) Research tasks- grammar- varies- many times to fill out around a task from the book
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) No, but I do teach the ethics with it in International English
12. If your school uses a learning platform, (ex. Fronter, Its Learning), how do you use this in your English teaching? Bulletin board has all daily lessons and notices that they are to be aware of, the planner this weeks lessons and learning objectives, on the tree to the left, there is one file for general information- evaluation criteria, etc.; then a file for chapter plans- year plans etc.; then a file for delivery of lessons and tests; and finally a file that is organized by topic with additional material for them to use connected with the text book.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? Poorer concentration, music files, videos, especially weaker students are easily distracted
14. Has your employer given any form of education/training when it comes to digital tools? Yes
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? Yes

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Buskerud, 4 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Female, 47**
2. Please state for which county you work. **Norway Buskerud**
3. What kind of education do you have? **Hovedfag – Masters Degree**
4. How long have you practiced as an English-teacher? **23 years**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **Yes, I use ICT every lesson, integrated in what we do**
6. What is your level of skills when it comes to the use of digital tools*? **Good - advanced**
7. What kind of digital tools do you use when teaching English? **Lokus, diff. grammar websites, vocabulary exercises, Quizlet, NDLA, BBC, youtube, diff TV "Al Jazeera"**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **positive**
9. Do you use the textbook as much as before the PC-scheme was introduced? **Almost as much**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **grammar, assignments,**
11. Do you use social media in the English classroom? **Not really.**
Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. **Facebook, Twitter** etc.) **Facebook, Twitter, instagram**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **It's learning: I use it all the time, put in presentations, assignments, messages etc**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **If they work online, they are easily distracted. Also, social media may interrupt the students and take their focus**
14. Has your employer given any form of education/training when it comes to digital tools? **yes**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **yes**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the **questions** as thoroughly as possible. Thank you.

1. Please state your gender and age. **Male 51**
2. Please state for which county you work. **Buskerud**
3. What kind of education do you have? **Master**

4. How long have you practiced as an English-teacher? **25 years**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **Yes. I had to stop having book analysis as home work.**
6. What is your level of skills when it comes to the use of digital tools*? **Average.**
7. What kind of digital tools do you use when teaching English? **PC, internet and It's learning.**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **Mostly positive.**
9. Do you use the textbook as much as before the PC-scheme was introduced? **No.**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **Grammar tasks**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **Never, but I am familiar with Facebook.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **Tests, extra texts, links to YouTube**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **To keep focus when we use the internet. Technical problems like no net or documents that "disappears".**
14. Has your employer given any form of education/training when it comes to digital tools? **Yes**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **Yes**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 36.
2. Please state for which county you work.
Buskerud
3. What kind of education do you have?
BA (Hons) in English Language and Linguistics, Praktisk-pedagogisk utdanning.
4. How long have you practiced as an English-teacher?
1 year in China, 8 years in Norway.
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
I'm not aware of the "PC-scheme".
6. What is your level of skills when it comes to the use of digital tools*?
Reasonably advanced. I have used smartboards occasionally but not a great deal. I enjoy trying out new digital tools.
7. What kind of digital tools do you use when teaching English?

Quizlet, kahoot, itslearning tests, links to online activities, iFinger, student blogs.

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

-

9. Do you use the textbook as much as before the PC-scheme was introduced?

-

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

Vocabulary learning, grammar quizzes, sound files for texts, online research, writing essays etc, taking tests.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

Most of the classes I teach have a class Facebook group, which is used to post reminders to pupils about work, future tests etc. It's not specifically used for teaching, but as a way of keeping in touch with pupils. This is often where they choose to ask questions – almost none of them use itslearning to send messages.

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

All written work is sent in via itslearning. A pupil who sends in a word document will get their grade, comments on their work, and a .pdf file showing corrections to their language, in itslearning. All of the grades are tracked via itslearning, tests are taken in "prøvemodus" or as normal assignments with internet access removed. I create folders for material which can be used to prepare for tests, and send out reminders when work is late.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

-

14. Has your employer given any form of education/training when it comes to digital tools?

Yes, but not recently. New pieces of software / ways of working have appeared, with no explanation on how or in which circumstances we should be using them (e.g. Office 365). There used to be a school IT group, where in a group of one teacher per department, we had meetings to share ideas about the use of IT in the classroom, and we had a mandate to help colleagues in our department with IT-related issues. This group was disbanded with no explanation to the members and no further offers of help to teachers needing IT assistance (other than technical support) have been forthcoming.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Quite possibly. But these expectation are not made clear to the employees.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 49
2. Please state for which county you work.
Ringerike, Buskerud
3. What kind of education do you have?
4-year bachelor with additional courses
4. How long have you practiced as an English-teacher?
22 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
Yes. Now it is easier for students to edit their texts, to save their notes (whereas previously they would get lost in the bottom of their backpack, never reaching their physical folders), but we, the teachers, now have to compete with the entire digital world (eg. Facebook, Youtube, etc). However, students also have easier access to digital information they might need for classes or projects.
6. What is your level of skills when it comes to the use of digital tools*?
Good. For a teacher I think it is quite okay and sufficient in order to manage my classes.
7. What kind of digital tools do you use when teaching English?
PC, smartboards, It's Learning, Kahoot, power point, NDLA, different text books' web sites
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
All in all positive, as long as the teacher manage to control the students' use of it
9. Do you use the textbook as much as before the PC-scheme was introduced?
A little bit less.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
Grammar, interactive tasks connected to the main text, reading, information search.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
No! As a private person I use Facebook, Twitter, Snapchat.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
It's Learning: I communicate with my students, I give homework, I post everything they need there (plans, tasks, information, tests, feedback,....). I depend on it and use it in every lesson.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
To keep students' attention focused on what is going on in the classroom. However, not as many students act out or prove to be a nuisance anymore because they disappear into the digital world instead of disrupting and making noise.
14. Has your employer given any form of education/training when it comes to digital tools?
Yes, we have and have had short courses and digital workshops for several years.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
Yes. I have attached a file which shows what my school expects of our teachers.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Finnmark, 2 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **38, female**
2. Please state for which county you work. **Finmark**
3. What kind of education do you have? **Bachelor in language/lit. major in English lit. and literary studies in general, 60points in Spanish. (Ongoing: Master in English, but not finished)**
4. How long have you practiced as an English-teacher? **5.5years**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **There is a difference every year, PC or not, I always try to improve my didactical skills, but I have explored more the use of digital tools the last couple of years.**
6. What is your level of skills when it comes to the use of digital tools*? **Depends on how the criteria are set for assessing my level... However, in general, I use digital tools or give the opportunity to use digital resources in more or less every class, every day.**
7. What kind of digital tools do you use when teaching English? **Interactive grammar-sites (ego4u.com, BBC), digital feed-back, digital logs, textbook internet resources, you-tube, google-docs, quiz-let.com etc.)**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **Extremely positive, I use small films to make the topics easier to remember, I use music actively. I only use the textbook as one of my resources, compared to earlier where one might plan according to the progress suggested by the authors of the book(s)**
9. Do you use the textbook as much as before the PC-scheme was introduced? **See above**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **Se answer to question 8**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **we have a group on facebook, and the students write questions there, I also give out information there.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **Use it for feed-back on assignments, all students that are not in class receive a text message what we have done that class, if I am not able to have the class for some reason, I send a personal text to all students. I use Fronter to upload links and fact-material that students may use as research material for assignments, lectures etc. that exceeds what we have time to go through in class.**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **Every year there are new challenges with regard to how to make students work**

with what they are supposed to when they have time to work individually. I have adjusted my way of organizing these activities accordingly. I have for one divided up larger assignments into several smaller steps on the way to a complete product. Each step takes shorter time to finish and I am much more around, looking at each student's progress. Secondly, I have a short one-on one conversation when each step is due, in order to ensure that no one is allowed to slip under the "radar" at a much earlier stage of an assignment than when the final product is supposed to be handed in. This has so far resulted in a much higher percentage of students finishing their assignment than before. Also, I am able to include much more self-assessment than before.

14. Has your employer given any form of education/training when it comes to digital tools? **Yes, but that is mostly on programs that are necessary to register absence/grades etc.**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **Yes, they expect that digital tools are available in almost every class for those students that work better that way, also in is one of the five skills that are supposed to be incorporated ideally in every lesson.**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 27
2. Please state for which county you work
Finnmark
3. What kind of education do you have?
Master in Development and International Relations
4. How long have you practiced as an English-teacher?
Three years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
No. I have always used digital platforms and PC's in my teaching.
6. What is your level of skills when it comes to the use of digital tools*?
Expert in most. I use, PC, IPad, Social Networks, GoogleDocs, Ebooks, different computer programmes – such as word, powerpoint (on PC), I use Keynote, Itunes, Imovie, Pages (on Mac).
7. What kind of digital tools do you use when teaching English?
GoogleDocs, Itunes, Facebook, Twitter, various moviestreaming programmes.
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
Definitely positive
9. Do you use the textbook as much as before the PC-scheme was introduced?

No, but I never used textbooks

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

Reading, Grammar, Listening exercises, various interactive group assignments.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

I use Facebook, Twitter and Youtube in class. Privately, I use Facebook, Twitter, Youtube, BuzzFeed, LinkedIn, Instagram

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

Fronter. All we use in class is uploaded to Fronter, and written assignment are handed-in in Fronter

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

Mostly having the students keep focus, but I find setting up ground-rules for use of the internet and smartphones help.

14. Has your employer given any form of education/training when it comes to digital tools?

My former employer has. I have been to several courses on the use of digital tools in teaching

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Yes, they are to be implemented and used as a supportive tool for the learning processes in the students. So, it is expected that we use them when we deem necessary, and in the extend we find it relevant.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Hedmark, 3 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female 36
2. Please state for which county you work.
Norway
3. What kind of education do you have?
Bachelor in language and culture with "PPU".
4. How long have you practiced as an English-teacher?
For five years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
I have always used PC in the classroom

6. What is your level of skills when it comes to the use of digital tools*?
My skills are average. I need help to figure out how to do new stuff.
7. What kind of digital tools do you use when teaching English?
Power point, It's learning most of the time
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
I think it is very positive
9. Do you use the textbook as much as before the PC-scheme was introduced?
I don't know, because I have always used PC
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
We tried to introduce digital books for TIP-pupils, but they didn't want to use them. They meant that it was easier to use the paper version.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
I do not use social media in the classroom, BUT some classes have created a page that I have access to. The important messages that I put out on It's learning is also posted there because some students tend to spend more time on Facebook than on It's learning.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
All plans and messages are there, all feed back to the pupils (hand ins, comments on hand ins and oral presentations), teaching evaluation are there, I post planning for the weekly teaching there (theme, page in book, sources if internet pages are being used, Tasks in class/ homework/hand in). Because I give feed back individually on It's learning, I also have a good overview of the comments I have given to the pupils (by using "Vurderingsoversikt"). The pupils and their parents can have access to this information at all time.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
The pupils use other sites than they are supposed to.
14. Has your employer given any form of education/training when it comes to digital tools?
Yes, we can attend course so that we can learn. This is normally held by colleagues that use this all the time and are good at it.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
As long as the digital tools benefits the pupils, he is very open minded. We are free to use digital tool if we think this has a learning potential.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

Male, 27

2. Please state for which county you work.

Hedmark

3. What kind of education do you have?

Bachelor I økonomi og administrasjon

English årsstudium+påbyggingsstudium, 90sp totalt

PPU

Master I kultur- og språkfagenes didaktikk (påbegynt, avgangår vår 2015)

4. How long have you practiced as an English-teacher?

Since the fall of 2013

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

Didn't teach before the PC was introduced

6. What is your level of skills when it comes to the use of digital tools*?

5 years of work experience in the technology industry, very advanced knowledge of technology down to being a programmer and amateur hardware developer

7. What kind of digital tools do you use when teaching English?

I only use the provided school laptop for printing, which I rarely do. I otherwise use an iPad mini as my main tool for everything, from teaching to grading, as the only person at that school. I also carry both a wired VGA adapter for connecting to a projector and an Apple TV with VGA adapter to connect wirelessly, allowing me to roam the classroom while connected to the projector. I often use this to be able to move about while showing something on the projector, like with a Powerpoint remote, but with full controls over the device to be able to e.g. switch to Google Maps or something similar.

I also have a cheap 8" windows tablet that I sometimes use as a second screen, and a Kindle Voyage that is mostly for personal use but that I have in my bag in case I need to lend a student a copy of a document/textbook/whatever (when they don't have their computer). I also carry a Bluetooth speaker to avoid using the outdated, bass-heavy classroom speakers, and use a 4G equipped iPad to avoid using the slow school network.

I convert all student hand-ins to PDF and grade them in PDF Expert on the iPad, which allows for highlights, handwriting (which is what I mostly use to grade, using an Adonit Jot Touch Pixelpoint

pen), and audio comments (which I sometimes insert into PDF files to explain more complicated issues, like issues of idiomaticity for advanced students. I also use the PDF audio comment feature to create narrated PDF files for students with dyslexia, which work similarly to Smartbok – click an icon to have the text read.

I also use PDF to create material for students, using the forms feature to be able to make interactive PDFs with fields for answering tasks. I do that to be able to create my own “textbook chapters” in classes where I rarely use the book (such as specialization in general studies-classes). In some classes I (and sometimes the students) have Smartbok licences, and use the features there, although there are many issues with that platform – so it mostly comes down to showing the book on the projector.

A final use of PDF is to create support documents for grammar, plagiarism, and whatnot. In one of those I also have a link to a Google Forms survey where students can suggest things to add to the document.

Other digital tools include Kahoot, Sketchparty (an iPad game suitable for use in small classes where only a single iPad is available), and various online tools like mind map creators. I also use Explain Everything and/or iMovie on the iPad to create video lectures, I have multiple dictionaries on the iPad that students sometimes use, and then there are “support apps” like Google Maps, Google Earth.

Furthermore, I’ve developed a teaching routine that uses Minecraft to teach communication and vocation-specific words for certain vocational classes. I’ve also used other games, like the beforementioned Sketchparty, as well as some games I’ve developed myself – a state bingo game for teaching US states that I made an app for, and a DIY “four pics one word” game for British politics.

We don’t have access to smartboard, but they’re fairly useless anyways when a wirelessly connected iPad with a pen does the same thing, which I sometimes use.

There’s probably more as well, but that’s what I remember off the top of my head. The bottom line is that I don’t use neither paper nor the blackboard very often.

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

If we’re talking about PCs, I find them to be outdated and ready for the garbage bin. If we’re talking technology in a broader sense, i.e. iPads and whatnot, it’s a completely positive contribution to me as a teacher. Less so to students who cannot seem to use technology as a tool, but rather as a toy.

9. Do you use the textbook as much as before the PC-scheme was introduced?

I didn’t teach back then, so not relevant.

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

All sorts of tasks. It ranges from having students answer textbook tasks on their PCs, to answering my “DIY textbook” type PDFs, to doing something completely digital – where recent examples include finding out about the Scottish vote for independence last fall online or further exploring references to Native American culture found in Sherman Alexie’s *The Absolutely True Diary of a Part-time Indian*.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

I have used social media as a message platform when the contact teacher has made a Facebook group for the class, but on my own I've only used virtual social media (i.e. write a blog post/facebook message, but don't post it anywhere). We've also worked with online bullying and looked at online comments as part of that.

I know of/use/have used Facebook, Twitter, Google+, wiki software, blogging software (including setting up software like Wordpress on a server), Snapchat, etc.

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

We have It's Learning, which I mostly use in the way we're supposed to at our school – i.e. use the planner, assessment system, message board, etc. I always make sure to post everything the students need there, including video lectures, keys, powerpoint presentations, tasks, etc.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

First off, students don't use technology properly. They very often abuse it or use it to do something completely different from what they should. I find myself printing material more and more often just to be able to tell them to keep the PCs closed, as the moment they open them up, they're off doing everything from chatting on Facebook to playing Hearthstone.

Second, teachers are fairly clueless as well. In my (limited) experience, technology knowledge among teachers is at best very basic. This has widespread repercussions, from substitutes who don't understand how to operate various tools (i.e. kahoot, language lab, or advanced PDF features), to cooperation being slow (e.g. issues sending a file, file type choice issues [people really need to stop using Word for everything]), and so on. I try to help, but there simply isn't enough time to get people up to my own notion of basic knowledge.

14. Has your employer given any form of education/training when it comes to digital tools?

Very limited. The IT department gives limited training in PC usage, e.g. now with the switch to Windows 8, but at the same time doesn't approve of non-standard IT use at all. If I want to talk about digital tools in meetings there is time available for that, but that's hardly very official, and limited in scope.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

We're required to use very basic digital tools, like It's Learning, Skolearena, and whatnot, but as for actual teaching I don't think so. It's not even a requirement to grade digitally or keep digital copies of graded hand-ins, which is rather odd when feed forward assessment is taken into consideration.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
M - 62
2. Please state for which county you work.
Hedmark
3. What kind of education do you have?
A lot. A number of grunnfag / mellomfag, Master etc etc. Grunnfag in English + 30 years usage of English as a primary / working language. English A-levels.
4. How long have you practiced as an English-teacher?
Only a couple of years.
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
No, because I have only a short experience.
6. What is your level of skills when it comes to the use of digital tools*?
fairly high I think, have a degree in computer science as well.
7. What kind of digital tools do you use when teaching English?
The usual ones – Powerpoint, Word, Internet ++
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Both. It can be a bit disturbing, but with proper classroom management I think it is mainly a blessing.
9. Do you use the textbook as much as before the PC-scheme was introduced?
I use both.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
For finding information.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
I know these, but do not use them in the classroom.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
In the same way as when I teach other subjects: For all digital communication with the students. Plans, tasks, tests, etc etc
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
None, really
14. Has your employer given any form of education/training when it comes to digital tools?
Not really

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Probably, but I have never seen or heard them expressed.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Hordaland, 5 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 43
2. Please state for which county you work.
Bømlo
3. What kind of education do you have?
Bachelor of education
4. How long have you practiced as an English-teacher?
14 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
Yes. I use the book a lot less and NDLA + other sources more. Almost everything they work with in class and hand-ins are on the computer. Interactive exercises on vocabulary, grammar and comprehension are also used frequently. Have started to use Kahoot to summarize each topic.
6. What is your level of skills when it comes to the use of digital tools*?
PC, smartphone, i-pad, textbook's internet resources, It's Learning etc – good skills.
7. What kind of digital tools do you use when teaching English?
PC, smartphone, It's Learning, textbook's internet resources, NDLA,
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Mostly positive. The most negative would be the effect it has on the students attention span. They are easily distracted by social media etc on the computer.
9. Do you use the textbook as much as before the PC-scheme was introduced? No
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) Source – reading tasks and interactive tasks.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) No. I use Facebook privately.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? It's Learning is used as a file system where all the material and links we use for each topic is filed. I post the lessonplans daily, they view their grades and feedback here and hand-in their assignments.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? The students are easily distracted by social media etc, sometimes hard to keep their attention, loss in time efficiency at times.
14. Has your employer given any form of education/training when it comes to digital tools? Yes
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? Yes, they see the use of digital tools as a basic skill that all students should master.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
 - a. Female 40
2. Please state for which county you work.
 - a. Norway (Hordaland)
3. What kind of education do you have?
 - a. "Engelsk grunnfag" from a Norwegian " høyskole"
4. How long have you practiced as an English-teacher?
 - a. For 10 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
 - a. I have always used digital resources in my teaching, but more now than before, since a lot of our learning material is based on digital resources like NDLA, different textbook websites, Learning platforms, kahoot etc.
6. What is your level of skills when it comes to the use of digital tools*?
 - a. Good
7. What kind of digital tools do you use when teaching English?
 - a. PC, smartphones and applications, the textbook's websites, It's Learning, e-books, social media, different computer programs
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
 - a. Positive
9. Do you use the textbook as much as before the PC-scheme was introduced?
 - a. Still use the textbook a lot, since I believe reading is important when learning a language, but *the way* I use the textbook may have changed.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
 - a. Grammar, presenting different themes, working with tasks etc

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
 - a. Not much
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
 - a. For hand-in's, multiple choice tests, information to students, make my teaching material available for the students
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
 - a. Easy to lose the students attention when they're at their computers. Plagiarism, Google translate
14. Has your employer given any form of education/training when it comes to digital tools?
 - a. yes
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
 - a. yes

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Female, 43 yrs old**
2. Please state for which county you work. **Hordaland Fylkeskommune**
3. What kind of education do you have? **Cand Philol, "hovedfag" in History**
4. How long have you practiced as an English-teacher? **8 yrs**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **Have not taught before PC-scheme was introduced**
6. What is your level of skills when it comes to the use of digital tools*? **Fair to good**
7. What kind of digital tools do you use when teaching English? **PC, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **See answer 5)**
9. Do you use the textbook as much as before the PC-scheme was introduced? **See answer 5)**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **Grammar, listening, fact-finding**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **No social media in the classroom, familiar with/use Facebook, Twitter**

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **For setting tasks, links to tasks, for all kinds of information**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **See answer 5)**
14. Has your employer given any form of education/training when it comes to digital tools? **Scantily, and for specific purposes only (mind maps, One-note etc)**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **Nothing, apart from the expectation that I help fulfil the aim (læreplanmål) that students should be computer literate in all subjects.**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Female - 52**
2. Please state for which county you work. **HFK**
3. What kind of education do you have? **University – English – German – Economics: 6 years**
4. How long have you practiced as an English-teacher? **26 years**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **Yes, because the students use the pc now in addition to the textbook**
6. What is your level of skills when it comes to the use of digital tools*? **Middle level**
7. What kind of digital tools do you use when teaching English? **PPT, Word – presentation, different web-sites, etc**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **Both, because the PC-scheme makes it harder to be focused, there is so much information and students at a low level have more problems structuring what to learn**
9. Do you use the textbook as much as before the PC-scheme was introduced? **No, not quite, but I use the textbook more than the pc during lessons.**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **Finding news articles, using NDLA, when students are doing their in-depth study programs, grammar tasks, etc**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **No, have not used it in the classroom, but as a private person I use FB quite a lot.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **We use It's Learning and students get their homework there, they hand in their assignments and tests, they send messages to the teacher, almost everything**

which is done in the classroom is put there to inform the students and for them to look up what we have studied later.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? It can be hard in certain classes to get the attention, because if they are allowed to work on the pc, some of the students tend to go to other sites than allowed e.g. FB and this happens when the teacher does not and cannot see what they are doing due to e.g. helping other students in the classroom. It makes the whole situation frustrating and challenging. Therefore my students are most of the time not allowed to use the PC, because they seem to concentrate more when they read and study the textbook and write in their notebooks. Then again the exam is on the pc and they need to practise, accordingly everybody has to find a system which functions the best way possible.
14. Has your employer given any form of education/training when it comes to digital tools? Yes, there have been lessons of training.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? Yes, since there has been quite a lot of focus on training and practising, I think it is expected we use digital tools and also because it is written in the curriculum that students should be taught it.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. Male, 35
2. Please state for which county you work. Hordaland
3. What kind of education do you have? MA in Comparative Politics, mellomfag i engelsk og historie
4. How long have you practiced as an English-teacher? 5 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
6. What is your level of skills when it comes to the use of digital tools*? Quite good.
7. What kind of digital tools do you use when teaching English? PC, smartboard, the textbook's internet resources, learning-platforms, different computer programs
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Both, but more positive than negative
9. Do you use the textbook as much as before the PC-scheme was introduced?
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) I do not use social media in the class room, but I have a Facebook account

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? *I use It's Learning for all purposes – I put out semester plans, lesson plans, notes from presentations, web links, tasks, tests...*
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
14. Has your employer given any form of education/training when it comes to digital tools? *A few rudimentary sessions have been given.*
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? *Yes, they expect us to integrate it into all our subjects.*

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Møre og Romsdal, 2 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. *Male, 47*
2. Please state for which county you work. *Norway (Møre og Romsdal)*
3. What kind of education do you have? *Cand. Philol.*
4. How long have you practiced as an English-teacher? *18 years*
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. *I use the PC more frequently, including NDLA and Lokus as sites for learning. I also use grammar-pages for interactive use.*
6. What is your level of skills when it comes to the use of digital tools*? *PC, the textbook's Internet resources, learning-platforms, multimodal texts, e-books, and different computer programs.*
7. What kind of digital tools do you use when teaching English? *All of the above*
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? *It is an asset in the arsenal of means you could use as an English teacher. However, it is also a distraction.*
9. Do you use the textbook as much as before the PC-scheme was introduced? *Yes, I do. I feel that the textbook is a safe, physical object, both for pupils and teachers. And in an age where budget-cuts are frequent and there is a gradual switch to digital means, I feel the textbook is even more important as a basis for what I do.*
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) *I feel that a PC is suitable for both grammar- and reading-tasks. In addition, I use the PC for gathering information, teaching students about sources and references, and reading the news.*
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook,

- Twitter etc.) *I generally do not use social media in the English classroom. I use Facebook privately, and occasionally to reach pupils that consistently are not to be found on Fronter.*
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? *I use Fronter, however It's Learning is a much better program. A problem our county is that they want us to use the program that has got the pedagogically worst lay-out and the worst interface. I use it as a platform for hand-ins, plans, messages and links. I also plan my week in Fronter using the calendar (the only part I find ingenious in Fronter).*
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? *Clip and paste works (for students who are lazy or otherwise challenged), peace and quiet in the classroom (especially after work is finished in the classroom, as some then want to check up on Facebook updates), and pupils hiding behind screens. However, these are challenges it is possible to organize yourself away from, at least the two latter.*
14. Has your employer given any form of education/training when it comes to digital tools? *Yes.*
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? *Yes, as Fronter, SkoleArena and Outlook have to be mastered in order for you to function properly in the school as a teacher.*

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female – 42
2. Please state for which county you work.
Møre og Romsdal fylkeskommune.
3. What kind of education do you have?
Cand.Phil. / lektor med opprykk
4. How long have you practiced as an English-teacher?
9 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
Yes. The use of computers and the Internet allow me to be very flexible. It is easier to improvise and give students answers and specific examples to the things they are wondering about, the moment they ask about it, the moment they are interested and

receptive. YouTube is one of my favorite tools. I can show scenes from films, interviews, music videos, find lyrics, poems, etc.

6. What is your level of skills when it comes to the use of digital tools*?
PC, iPad, smartphones, the textbook's internet resources and other learning-platforms, multimodal texts, e-books, social media, blogging, Photoshop, Audacity, PhotoStory, and more: good skills. I'm a quick learner.
7. What kind of digital tools do you use when teaching English?
PowerPoint, Quizlet, Kahoot, video, interactive exercises, the Internet in general.
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
It is positive, but only as a supplement to all the other things we do. It is also very important to closely monitor the students' activities on the Internet. They have a tendency to drift to other websites as soon as they are online. They believe they are able to multi-task, but extremely few are.
9. Do you use the textbook as much as before the PC-scheme was introduced?
Yes, and I will keep on using it as before. It works a lot better. Besides, students spend enough time in front of a screen as it is. The repercussions on the ability to concentrate, sleep, and health issues in general are still under debate.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
Not today. I have used blogs in the past. I may do it again, the methods I use always depend on the groups I have to work with. If a class responds well to the use of social media, I will use them, if a group learns best and becomes more motivated when we work with dramatizations, then we use that method a lot.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
Fronter. I post plans, links to newspapers, articles, videos, extra texts, notes, extra exercises, information about the exams. My students hand in some of their work there. I sometimes give them feedback online (especially for short answers), otherwise I print their texts, comment directly in the text, and give them oral feedback as well to make sure they understand.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

The main challenge is to ensure the students don't get distracted. To begin with I saw a lot of students try to pass other texts as their own, but this doesn't occur often any more. Also, it can be frustrating when educational websites are not up to date, when links disappear or no longer function, and when the programs do not function as they are supposed to.

14. Has your employer given any form of education/training when it comes to digital tools?

Yes, I have been to many courses.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

My employer believes I know my students best and therefore know best which methods will work with whom.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Nordland, 4 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

I am 64 years old and male.

2. Please state for which county you work.

I work for Nordland fylkeskommune.

3. What kind of education do you have?

I have English mellomfag (11/2) year, from the University of Bergen.

4. How long have you practiced as an English-teacher?

I have practiced for 35 years (30 years in upper secondary school).

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

I think that the main difference is the use of teaching material on the web to be used with the textbook, the use of YouTube, where there are many good resources, and also the use of newspapers to find interesting news articles. The last two years our school has taken part in tests where the students could use an open Internet when having their exams (International English and Samfunnsfaglig Engelsk), so we have had to add extra focus on the use of Internet sources.

6. What is your level of skills when it comes to the use of digital tools*?

I feel that my level of skills is rather good, I guess it is partly due to the fact that I have taken a one-year course in computing for teachers (60 studiepoeng).

7. What kind of digital tools do you use when teaching English?

I use YouTube a lot, the textbook's teaching resources and the learning platform (It's Learning) for short tests, hand ins and hand outs (background material).

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

As a teacher, I feel rather positive about it, but I also see that students are very often distracted by using the Internet for unwanted purposes in the classroom. Plagiarism is also a serious problem, which has to be addressed quite often.

9. Do you use the textbook as much as before the PC-scheme was introduced?

Yes, I think so.

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

I do not use it instead of the textbook very much, but rather as a useful supplement.

Grammar tasks where they get their score at once are great, and they seem to like it.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

No, I do not fancy using social media in the classroom.

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

We use it for short tests, hand ins, hand outs (background material) and sending and receiving messages

13.

14. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

I guess the main challenge is keeping the students focused in the classroom.

15. Has your employer given any form of education/training when it comes to digital tools?

Yes, but mainly it has been quite elementary (like how to use It's L.)

16. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Yes, we are encouraged to use digital tools as much as possible.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Female, age 26.**

2.

3. Please state for which county you work Norway.. (Nordland)
4. What kind of education do you have?, Allmennlærerutdanning Universitet i Tromsø.
5. How long have you practiced as an English-teacher? Four years.
6. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. The computer have always been an important tool in my classrooms.
7. What is your level of skills when it comes to the use of digital tools*? Quite good.
8. What kind of digital tools do you use when teaching English?
 - a. Digital storyline (wikidot)
 - b. different grammar excercises onlin
 - c.
 - d. Itslearning (off course)
 - e. www.socrative.com
 - f. Facebook
 - g. Access to English website
 - h. storybook. www.storybird.com
 - i. youtube
 - j. <http://peoplemov.in/#!>
 - k.
9. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Very positive.
10. Do you use the textbook as much as before the PC-scheme was introduced? yes
11. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) Grammar, reading, writing and oral tasks. My students often creates film which challenges them to use different skills.
12. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) My class has a facebook page where I post information and this is also a platform where the students can share work.
13. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? Itslearning
 - a. handing in tasks (both written and oral)
 - b. Feedback
 - c. Quizzes'
 - d. tests
 - e. Information
 - f. etc...
14. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? The biggest challenge is to make sure the students are spending time with what they are supposed to.
15. Has your employer given any form of education/training when it comes to digital tools? It was not necessary in my case, but there have been training for some of the older teachers.

16. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **Yes, our school has decided to focus on digital learning. E.g. I held a training course in digital storyline.**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 45
2. Please state for which county you work.
Nordland
3. What kind of education do you have?
Allmennlærerutdanning + nordisk grunnfag + engelsk grunnfag og mellomfag. (Adjunkt med tilleggsutdanning)
4. How long have you practiced as an English-teacher?
20 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain!
Obviously, the teaching aids have changed. I now have a much more extensive and up to date "bank" of resources to use when I prepare lessons and when I teach. There are films, texts, tasks, tips, games, websites, sound files, pictures, blogs, etc. that I can use. I find that the way I teach is more varied now because I have more tools and resources at hand and my "method repertoire" is more extensive because of that.
6. What is your level of skills when it comes to the use of digital tools*?
I am a proficient user of digital tools, but not an expert.
7. What kind of digital tools do you use when teaching English?
PC: internet: films, film-clips and videos (YouTube and Vimeo), textbook websites and other websites, sound-files, smartphones/app (mostly Kahoot), It's learning, NDLA. I used to be able to use a Smartboard, but I changed departments and the Smartboard stayed in the old department...
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
Definitely positive.
9. Do you use the textbook as much as before the PC-scheme was introduced?
Not as much, but it is still being put to good use.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
Listening tasks, grammar tasks, research tasks, making multimodal presentations.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
I use Facebook, but only to give and receive messages to/from students. I am in the process of learning to utilize Twitter-searches, but I find that not many students have Twitter-accounts. In my private life I use Facebook, Twitter and Instagram.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
I use It's learning to upload tasks and files and students upload their work for me to assess.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
The challenge is for the students to focus on their work and not stray off into internet-surfing and gaming.
14. Has your employer given any form of education/training when it comes to digital tools?
No. But on It's learning it is possible to participate on webinars.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
I think the only expectation is that I use It's learning as a learning platform.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Female 59 years old

Nordland Fylkeskommune

Bachelor Education, *Sydney University* 1979

TESOL *Canberra College of Advanced Education* 1984

Australia: 5 years in secondary schools

Norway: 1987-1989 secondary school and 2005 – d.d. upper secondary school

The difference in teaching English pre- and post-computers - Australia:

Pre-computers:

Australian language teaching system when I taught TESOL (migrants) in early 80's was traditional grammar translation methods. Worksheets. Audio lingual tapes. **Topics:** "How to make a doctor's appointment" and ones looking at Australia through the eyes of immigrants.

Post- computers:

Click here for today's updated digitalised site for migrants learning English in Australia:

<http://legacy.australianetwork.com/passport/> and here ["This is Australian Life"](#)

The difference in teaching English pre- and post-computers Norway:

Pre-computers:

Experience: 1987-1989 secondary school. Teacher directed. Textbook focussed strict national curriculum / objectives. Grammar-translation, gap exercises, overweight on written

texts, next to no aural/oral tasks, culturally limited to UK/USA - in one word – boring.

Post- computers:

Experience: 2005 – d.d. upper secondary school. My experience can be found in the attachment *Teknologi og pedagogikk – framtidsutsikter*, enclosed in this email.

What is your level of skills when it comes to the use of digital tools*?

Advanced. Read my blogg - in particular: [Det nye klasserommet](#), [Digital Læringsressurs VoiceThread](#), [Bruk av Padlet i engelskfag i Nettskolen](#), [Bruk av film i Nettopplæring](#), [Nyttig digital ressurs](#), og [Hva er omvendt undervisning](#)

What kind of digital tools do you use when teaching English?

a) **Slideshare:** 92 Slideshares: <http://www.slideshare.net/Frydenlund>

b) **YouTube Channel:**

- Vg3 Kultur og Litteratur SPR3012 - selvprodusert filmer. Example: [Romantic Art and Literature](#)

- Nettskolen I Nordland (Virtual School in Nordland County): Example: [Cybercrime and Cyberharassment](#)

c) **VoiceThread:** Example: [Poetry Analysis](#)

d) **Itslearning**

e) **NDLA:** <http://ndla.no/en/node/42>

f) **Exploring English:** [Grammar explanations in Norwegian](#)

g) **Padlet:** Example: <http://padlet.com/Fionajane/literaryterms>

h) **NRK skole:**

i) [BBC Learning English](#)

Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Advantages outweigh the disadvantages.

Do you use the textbook as much as before the PC-scheme was introduced?

Use the textbook every lesson, for reasons discussed in *Teknologi og pedagogikk – framtidsutsikter*, enclosed in this email.

If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

Norwegian English textbooks are as a rule, well written, up-to-date and relevant. Personally – I encourage my students to use their PC's for research, homework and essay writing. Some Vg3 students (to my great satisfaction) still write (beautiful) copy books. These students are extremely conscientious and have improved from 3/4 to 5/6 in the time I have had them (Vg2 SPR3008 and Vg3 SPR3012)

Grammar is covered ONLY if students have a problem. Work given individually often as short oral instruction sessions based on their hand in, at my desk whilst the rest of the class work with comprehension tasks. Don't give up until the student gets it. Use functional grammar today.

Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook,

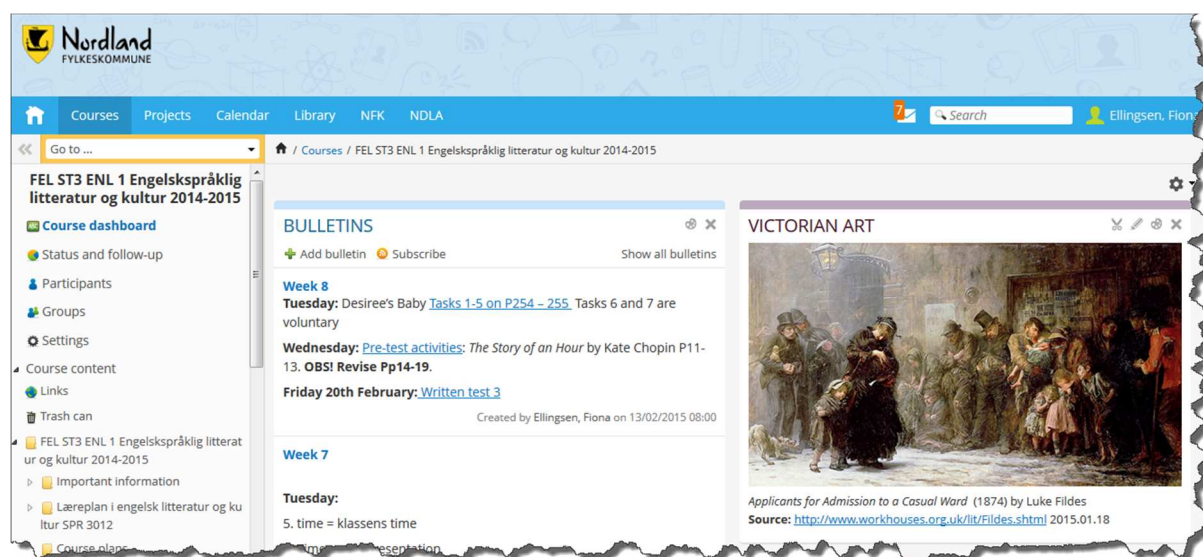
Twitter etc.)

NO (!) for reasons discussed in *Blogging i språkopplæring i nettskolen*, enclosed in this email.

Familiar with a use privately: FB, LinkedIn, Twitter and Blogspot.

If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

I utilise Its learning's to its full potential. Screensave from SPR3012 below.



What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

- Lack of eye contact
- Distraction – teach to bowed heads
- Unfocussed students
- Poor concentration amongst those students unable to resist the temptation to “surf”
- Reduced ability to remember – “have all the knowledge at their fingertips but know nothing”.
- Feel I have to “compete” for students’ attention
- The death of beautiful copy books
- Have to “lend” paper / pencils

Has your employer given any form of education/training when it comes to digital tools?
Extensive and ongoing

Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Yes. Both in my virtual classes in NiN face-to.face at xxxxxxxx vgs. (Anonymised by researcher)

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Nord-Trøndelag, 2 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

Female, 25.

2. Please state for which county you work.

Nord-Trøndelag Fylkeskommune

3. What kind of education do you have?

Integrated master's and teachers degree from NTNU (lektorløp), finishing with a Master's in English linguistics.

4. How long have you practiced as an English-teacher?

This is my first year.

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

I have never taught without computers.

6. What is your level of skills when it comes to the use of digital tools*?

I grew up using digital tools, and was the first class in my county to use it as a compulsory part of high school. I know the basics of Python and HTML. I struggle with hand-held devices, as I am not that used to them, but use other forms of digital tools frequently and proficiently.

7. What kind of digital tools do you use when teaching English?

Their computers, mainly through online resources. My students read texts, complete different tasks, play video games, record presentations, and learn different forms of online communications (ie. Blogging, forums etc.)

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

I see the use of computers as overwhelmingly positive, as it gives me opportunities I would otherwise not have had. The new didactic approaches I can take makes learning more available for all my students, especially those with learning disabilities. Using the digital platforms increases the use these students have of their extra tools, such as LingWrite, and increases their learning.

9. Do you use the textbook as much as before the PC-scheme was introduced?

I have used the textbook twice per class thus far this year.

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

Reading, searching information. I focus a lot on giving my students the ability to find and critically assess information, as it is a vital skill in a digital society.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

We have used Reddit and Tumblr so far, and will be using Twitter later on.

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

The platform is mainly a gateway to other websites, as well as a place to hand in tasks.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

The computers themselves are a limit. There are several excellent computer games, many years old, that could have been beneficial to my challenged students, but the computers are not able to run the games. The computers shut down without warning, projectors stop working... The technology we are supposed to use isn't as good as it could have been.

It can also be a challenge to make students focus, but I find that this is a teaching point as well. Most, if not all, of my students will spend parts of their working lives using computers, and they need to be able to turn away from Facebook, Twitter, and other temptations.

14. Has your employer given any form of education/training when it comes to digital tools?

Not for teaching. We were given a course in how to use Lync, a corporate version of Skype. Nobody has called me on this system yet, so I do not think this course has been significant.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

As we are supposed to use these tools, and we have not been given significant training, the employer expects us to be able to use it ourselves.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

Woman – 43 years old

2. Please state for which county you work.

Nord-Trøndelag

3. What kind of education do you have?

Allmenlærerutdanning, plus grunnfag maths and Norwegian, plus a lot of other subjects.
Master's degree in English didactics. A total of 10 years of higher education.

4. How long have you practiced as an English-teacher?
20 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
I was hired in VGS the year the computers were introduced so I have nothing to compare with.
6. What is your level of skills when it comes to the use of digital tools*?
Very high.
7. What kind of digital tools do you use when teaching English?
During the last 9 years, these are some of the tools I have used. However, it does not mean that I use them in all groups every year.
It's learning, YouTube, Facebook, Word/PowerPoint/Excel, blogs, internet newspapers, digital grammar games and other games which may be created to fit the topic at hand. Moviemaker, Voki, eTwinning, Lokus (lærebok på nett). Audacity. Ordnett Pluss. Urban dictionaries. CNN/BBC/NBC/NRK etc. Cell phones (filming and recording English).
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
A fantastic positive contribution.
9. Do you use the textbook as much as before the PC-scheme was introduced?
YES! The computer is just a didactic tool.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
Interactive tasks or web quests.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
Yes I do (see question 7). I teach social media more than I use it. Awareness is more important than using these media.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
For everything. All homework is posted there, messages to the students, hand-ins and all assessments are on it's learning. Also I upload all hand-outs and PowerPoints used in class. I also use it for quizzes, surveys and glossary tests. Links to different web sites are also posted on it's learning.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

I started working in VGS the same year as computers were implemented in our county, so I have grown with the task without having any means of comparing life before and after computers.

14. Has your employer given any form of education/training when it comes to digital tools?

Yes, but I have already a degree in "IT for lærere" from Høgskolen i Volda.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

No – not that I have noticed. As a teacher - yes. Just as all other teachers, but not in English in particular.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Oppland, 3 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. *Woman, 53 yrs old*
2. Please state for which county you work. *Oppland*
3. What kind of education do you have? *University, can.mag.*
4. How long have you practiced as an English-teacher? *20 years*
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. *I can use information faster, it is easier for the students to find "fresh" facts. But I have to be aware of many students not being able to "digest" what they find. The differences between students are more visible.*
6. What is your level of skills when it comes to the use of digital tools? *Average... I am not too good, but I ask my students (,-) if there are things I can't manage...*
7. What kind of digital tools do you use when teaching English? *I know how to use my computer, the digital resources from the textbooks, NDLA, social media,++*
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? *It varies a lot, the new students (vg1) tend to focus too much on Facebook, games, etc during the lessons, but as they understand that it is not a good idea when it comes to grades they get better. Sometimes it is VERY useful, sometimes a nuisance..*
9. Do you use the textbook as much as before the PC-scheme was introduced? *Not really, but it depends on the textbook. Some of them are better than others. I use NDLA a lot.*
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) *Grammar, writing tasks, finding information, news,*

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) *I am familiar with Facebook, this is also used in the classroom (but only for sharing texts, information, ect.)*
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? *I share information with my students, I publish links, give them tasks to hand-in. We use Fronter in Oppland, and this is not as good as It's learning when it comes to making exercises for the students (multiple choice..).*
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? *To have the complete attention from the students all the time! I very often have to repeat what I have just said. They have problems listening and watching their pc at the same time. They are also very clever when it comes to using texts found on the web, and also sharing (when they should NOT share..). But after we got Ephorus it is getting better. They have experienced being exposed.*
14. Has your employer given any form of education/training when it comes to digital tools? *Not very much! Most of it I have learned from colleagues or my students.*
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? *Yes, of course. And I cope.... But- it is not my job to be a multi-talent when it comes to giving the students a "show" by using digital tools. There has to be a purpose to what I do!*

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female 64 years old
2. Please state for which county you work.
Oppland
3. What kind of education do you have?
Cand. Philol.
4. How long have you practiced as an English-teacher?
Since 1981
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
At the beginning when the PC was introduced, it was exciting to discover all the many possibilities it offered. But later when we realised the students were using it for fun and games and not for the assignments we gave them, things changed. In some ways I returned to "old-fashioned" teaching, but I think the one thing that really changed was that I now often stand in the back of the classroom and observe – in order, of course, to catch any

miscreants, the reason for this daytime vigil being the internet searches that have become part of everyday teaching.

6. What is your level of skills when it comes to the use of digital tools*?
Fair to good
7. What kind of digital tools do you use when teaching English?
Digital classroom, with possibilities for e.g. multiple choice tests. PowerPoint and Prezi instead of blackboard, smartboard (only in a few classrooms) Assignments where internet searches are necessary. Search for teaching material – esp. in VG3 English, where newspaper articles are a must. NDLA, Kahoot
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? *After the initial childhood diseases mostly positive. There is still the odd student who cuts and pastes in assignments, but that happened before as well – and from books so plagiarism control was much harder. The amount of grammar exercises on net are a blessing for the students, eager to learn more, informative articles are easy to access etc.*
9. Do you use the textbook as much as before the PC-scheme was introduced?
Yes – the printed word is still the number one source in my lessons. I have been considering netbooks, but I think that if all subjects were to use netbooks, we would have students with “net syndrome” diseases in droves!
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
Grammar and other language exercises. The students will, of course, have to read articles and other information they have found on net, unless they choose to print it.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
I use blogs occasionally in class, and I personally am “friends” with different newspapers and other relevant sites on Facebook.
12. If your school uses a learning platform, (ex. Fronter, It’s Learning), how do you use this in your English teaching?
We use Fronter. I give information about what will happen in class. The archive is the good part, I have folders for tasks, grammar, PP-presentations (mine), newspaper articles (these are also in links), language, miscellaneous – anything that the students may need at a later date is placed there. In links I have addresses to sites in the English-speaking world, from newspapers to embassies.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
Use of PC for other than school work is the main problem – or rather it was, more and more students now only use the PC, when they are told to, and they seem to prefer pen and paper.
14. Has your employer given any form of education/training when it comes to digital tools?
Yes, esp. in the beginning. But there are still discussions when we have seminars, courses etc. Mainly these focus on misuse, but we also exchange useful information.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
None specified.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Male – age 58**
2. Please state for which county you work. **Oppland**
3. What kind of education do you have? **Cand. philol, University of Oslo, 1983**
4. How long have you practiced as an English-teacher? **32 years**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **Rely on more teaching material outside the textbook. Authentic material. Developing the writing skills of the students have become a lot easier.**
6. What is your level of skills when it comes to the use of digital tools*? **Average.**
7. What kind of digital tools do you use when teaching English? **PC, learning platform (Fronter), digital dictionaries (online and offline), the textbook's internet resources, authentic material from the Internet, writing tools.**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **Positive.**
9. Do you use the textbook as much as before the PC-scheme was introduced? **Yes, I still use the textbook as the main source in my teaching. I use, and let the students use, the PC for supplementary sources.**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **I do not use the PC instead of the textbook (see no. 10)**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **I do not use social media in the classroom because I am not familiar with social media myself. I am not on Facebook, Twitter, etc.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **For information and to save supplementary teaching material for the students, assessment and self-assessment, the students hand in and are given back written papers,...**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **The main challenge is that the PC with internet connection distracts the students during classes.**
14. Has your employer given any form of education/training when it comes to digital tools? **Very little.**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **The expectations are not particularly linked to the use of digital tools, more to my teaching in general.**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Oslo, 2 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

SORRY TO ANSWER IN CAPITAL LETTERS: I THOUGHT YOU MIGHT FIND IT EASIER TO DETECT MY ANSWERS THAT WAY ..

1. Please state your gender and age. F, 63
2. Please state for which county you work. OSLO
3. What kind of education do you have? TWO UNIVERSITY EDUCATIONS IN TWO DIFFERENT COUNTRIES, 9 YEARS IN ALL – 5 OF THESE ON MY MAIN SUBJECT.
4. How long have you practiced as an English-teacher? SINCE 1979
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. OF COURSE – WE USE WEBSITES ACTIVELY, ALSO THE INTERNET RESOURCES CONNECTED TO THE TEXTBOOK, STUDENTS MAKE PP PRESENTATIONS ETC
6. What is your level of skills when it comes to the use of digital tools*? MODERATE!
7. What kind of digital tools do you use when teaching English? TEXT BOOK WEBSITES, NEWS SITES, YOUTUBE, ETC ETC ETC. IPAD, TOO.
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? POSITIVE MOSTLY– IF ONE DOES NOT LET THE SCREEN DOMINATE TUITION ENTIRELY. WE HAVE MANY 'TOP DOWN' SESSIONS, TOO.
9. Do you use the textbook as much as before the PC-scheme was introduced? YES.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) GRAMMAR, VOCABULARY, BACKGROUND RESEARCH, THE NEWS, MUSIC, INTERVIEWS, FILM, ETC.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.). NO. I USE FB PERSONALLY. (THE REASON I OPENED AN FB ACCOUNT IN THE FIRST PLACE, MANY YEARS AGO, WAS BECAUSE STUDENTS MADE FB PROFILES FOR THE CHARACTERS OF A NOVEL WE STUDIED. I WANTED TO KNOW WHAT THEY WERE TALKING ABOUT, AND REALISED HOW GOOD THEY WERE ONCE I HAD AN ACCOUNT MYSELF.)
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? I GIVE ASSIGNMENTS VIA FRONTER, IS ALL. I TEXT MY STUDENTS VIA MY MOBILE PHONE IF NECESSARY (I KNOW THIS IS RIDICULOUS, BUT I FIND IT PRACTICAL).
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? AS YOU CAN SEE, I AM A DIGITAL IMMIGRANT RATHER THAN A DIGITAL NATIVE, SO IT HAS TAKEN SOME TIME TO FAMILIARIZE MYSELF WITH ALL THE TECHNICAL INTRICACIES (NOT QUITE THERE YET ;). THIS, OF COURSE, IS A PROBLEM THAT WILL DISAPPEAR AS WE , THE OLD 'EMBEDSEKSAMEN '-TEACHERS, WILL RETIRE – SOON.

14. Has your employer given any form of education/training when it comes to digital tools? YES, COURSES NOW AND THEN.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? OF COURSE. BUT WE ARE LUCKY ENOUGH TO BE TRUSTED TO TEACH PROPERLY, AND THERE ARE NO CHECK-UPS. WE ARE TREATED AS THE PROFESSIONALS WE ARE.

I HAVE 5 YEARS OF STUDY IN ONE SUBJECT ALONE (FROM THE NETHERLANDS, WHERE THIS WAS NORMAL AT THE TIME), IN ADDITION TO 3 OTHER SUBJECTS, AND FEEL MOST CONFIDENT PROFESSIONALLY, IN EVERY ASPECT OF MY JOB – AND SINCE WE ARE LUCKY ENOUGH TO HAVE AN EXCELLENT PERSON RUN OUR SCHOOL, WE CAN DO THE JOB WE ARE EXPECTED TO DO, WITHOUT ANY TIME CONSUMING REPORTS AND TICK OFFS.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

Female, 33

2. Please state for which county you work.

Oslo

3. What kind of education do you have?

Lektor med opprykk, master i engelsk + ppu

4. How long have you practiced as an English-teacher?

7 years

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

No, every student has had his/her own PC since I started teaching in 2008.

6. What is your level of skills when it comes to the use of digital tools*?

Average. I am no enthusiast or expert, but I get by, and make use of new tools if I find them interesting and if I regard them as being beneficial for learning.

7. What kind of digital tools do you use when teaching English?

Online tasks and sources, the students write, edit, hand in digitally, make digital stories (evaluation), record oral tasks via their PC, kahoots etc., I show them clips, websites, statistics.

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

I am not used to teaching without making use of PCs. I am positive towards the new technology, but I am negative towards Oslo kommune's policy saying that we should not block certain internet websites (like Facebook). This is done in many workplaces – why not among kids too? I am negative to the idea that students should always use PCs. I think it

should be up to the teacher to decide when to use the PC, and what to use if for. I do not think that making use of a PC necessarily makes you learn more.

9. Do you use the textbook as much as before the PC-scheme was introduced?
I use the textbook quite a lot, but I find it positive to be able to “spice up” what is in the textbook with things from the internet.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) I prefer the textbook for reading. I use the PC to find pictures, videos that illustrate things from the textbook.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) No, I do not. I use facebook and blogs privately.
12. If your school uses a learning platform, (ex. Fronter, It’s Learning), how do you use this in your English teaching? We use Fronter. That is where I keep all the information and online sources for my students in each subject. Hand-ins are also on Fronter.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? Distraction – computer games and facebook in class, plagiarism
14. Has your employer given any form of education/training when it comes to digital tools?
Some seminars on smartboard, but not enough to make me feel comfortable with it.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? No special expectations I think.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook’s internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Rogaland, 4 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 40.
2. Please state for which county you work.
Norway Rogaland
3. What kind of education do you have?
Master’s Degree + 1 year interpretation studies.
4. How long have you practiced as an English-teacher?
Since autumn 2003, so almost 12 years.
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
I started my career teaching in China. There was little technology available there, and also limited amounts of textbooks. Since I have been working in Norwegian schools (2006) I have been working in classrooms where pupils have laptops, so no I have not really experienced the transition into computerised classrooms to any real extent.

6. What is your level of skills when it comes to the use of digital tools*?
Above average in most areas, and I try to make extensive use of a variety of tools in the classroom.
7. What kind of digital tools do you use when teaching English?
PC, Phones, Internet, Google docs: for cooperative texts. Youtube for clips (watching / uploading/ editing), Mindomo for mind-maps, Photo story / I-movie for films / oral presentations, Audacity for oral presentations, Prezi- for presentations, Survey Monkey for surveys, Webs for webpages, Kahoot and Socrative for classroom competitions, Livemocha for language lab work, interactive grammar exercises, grammar games, it's learning and more.
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
The negative aspect is concentration: the students are easily distracted by the many entertainment opportunities available. The positive is a more authentic interaction with language, and more variety in the teaching methods used. I find the pupils struggle with some aspects of grammar, like subject verb agreement, but have excellent fluency, vocabulary, and sentence structure.
9. Do you use the textbook as much as before the PC-scheme was introduced?
I have never used the textbook to any great extent. I keep it mainly because pupils and parents expect it, and it is a convenient source of text that can be used as a starting point for exploring a topic.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
Grammar tasks: the textbook has a very limited supply of them. Reading tasks: especially when it comes to areas where the textbook is not up to date, or for example related to poetry where the book has a very limited selection. As I said, I tend to use the textbook as a starting point, so I use the digital sources regularly.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
Not to a very large extent. The class has a Facebook page for posting reminders, that kind of thing: and I use blogging from time to time.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
We use it's learning to post the work and documents the pupils need, list homework, send messages, tests, assignments etc.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? Largely that the money is being spent on hardware, not software. We have for example Smartboards, but without software they are just glorified video projectors. There is not much willingness to take the expense of experimenting with different types of software to find out if it can be useful: it has to be proven useful before an investment is made. As a language teacher software to convert PCs into language labs would be interesting, but there just aren't the funds. I also think NDLA might not be the best use of the money: as it is simply offering what is in a textbook, but in a less organized way: if a teacher is meant to use NDLA

instead of a textbook it will cost an enormous amount of effort to achieve a structure that the pupils can relate to.

14. Has your employer given any form of education/training when it comes to digital tools?

To a limited extent, occasional classes during teacher planning days.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Not that is expressed in any guidelines. It is more the effort of individual teachers on staff that highlights this.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

Male – 31 years old

2. Please state for which county you work.

Norway (Rogaland)

3. What kind of education do you have?

Master's degree in English.

4. How long have you practiced as an English-teacher?

For six years.

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

I used to teach secondary school, where we didn't have access to computers to the extent we do now. With the students using computers I've found I don't have to depend on the textbook as much. We can more easily find resources online.

6. What is your level of skills when it comes to the use of digital tools*?

Compared to older teachers I think my skills are better, but I think they are about average.

7. What kind of digital tools do you use when teaching English?

Mostly just the computer, to communicate with the students, sending hand-ins and hand-outs. I do use the occasional Powerpoint, but not as much as before. I use the computer to show pictures and videos.

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

Very positive. I find the textbooks we have insufficient. Access to computers makes it easier for us to use online resources like NDLA.

9. Do you use the textbook as much as before the PC-scheme was introduced?

No. We rarely use the textbook, although if we had better textbooks we might.

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

I find literature online (short stories and poems), so we use the computer for reading.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

I use Facebook, Twitter and Instagram myself, but I haven't used any of them in the classroom. We have It's Learning and we stick to that.

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

I use IL to give instructions, to share links, to give feedback on hand-ins, etc. I have my students hand in their homework on IL.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

As with any subject, I think the biggest challenge is to keep the students off Facebook and other social media. On the one hand, it's their responsibility, and they have to learn to control themselves, but on the other hand it's very distracting.

14. Has your employer given any form of education/training when it comes to digital tools?

Not that I know of, but I'm new at my school.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

We are expected to use them.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
 - a. Woman, 46
2. Please state for which county you work.
 - a. Rogaland
3. What kind of education do you have?
 - a. Master:
 - i. German language and literature (hovedfag)
 - ii. English language and literature (grunnfag)
 - iii. Sociology (grunnfag)
4. How long have you practiced as an English-teacher?
 - a. Since 1996
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
 - a. Yes, but the changes have come gradually
 - i. The student would take more notes before, obviously hand-written notes
 - ii. There were often paper hand-outs in my lessons, because I wanted alternatives to the reader.
 - iii. I was always searching for images that could be used in language and interpretation tasks. Now they are much more available.
 - iv. It was harder for the students to structure their material prior to an assignment before, because they kept losing their notes. Now chances are that the material is somewhere on their harddisk.
6. What is your level of skills when it comes to the use of digital tools*?
 - a. I am eager, but average in skills
7. What kind of digital tools do you use when teaching English?
 - a. It's-learning assignments, it's learning tests, also for student made quizzes, it's-learning surveys, also for handing in home-work, Passage web pages, Targets web page on Lokus.no, NDLA, especially background texts and writing instructions, Quizlet for learning words, Kahoot for summing up, Howjsay.com for pronunciation, Ordnett pluss, PowerPoint for presentations, postermaking, collages and e-lessons, Prezi for presentations, YouTube for e-lessons, music videos etc.
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
 - a. Positive
9. Do you use the textbook as much as before the PC-scheme was introduced?
 - a. I guess not
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

- a. We prefer the book/paper for reading and for oral tasks. Grammar tasks are often done on the PC, however, I often bring paper versions for those who prefer paper exercises.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
 - a. No, I prefer school sites for school work
 - b. I am an eager user of Facebook, and I use Twitter every now and then.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
 - a. Listed under 7
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
 - a. Mostly the effect that students are distracted from school work through easy access to entertainment on their laptop
14. Has your employer given any form of education/training when it comes to digital tools?
 - a. Yes, but the emphasis was much stronger some ten-five years ago.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
 - a. I feel quite free to use what tools I want.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

Female, 49

2. Please state for which county you work.

Rogaland

3. What kind of education do you have?

Master's in English Literature (hovedfag)

4. How long have you practiced as an English-teacher?

23 years

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

Yes, access to the Internet has extended the range of possibilities – sources, activities, etc. It is so much easier to use a variety of authentic texts now, to allow the students to listen to a

variety of English accents. It makes research much easier for the students. So as teachers, we can spend less time on the basics, and more time on more advanced cognitive activities.

6. What is your level of skills when it comes to the use of digital tools*?

Fairly competent. I have taken the first module of 'Klasseledelse med IKT'

7. What kind of digital tools do you use when teaching English?

PC/Mac, smartphones, its learning, NDLA, the textbook's internet resources, Quizlet, Kahoot, Glogster, GoAnimate, Wordle, iMovie/Digital Story, etc.

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

Positive – it has opened up for a lot of fun classroom activities. The learning platform is an amazing tool for information to and from students, and for correcting and archiving students' texts.

9. Do you use the textbook as much as before the PC-scheme was introduced?

No, much less. I tried teaching Vg1 without a textbook for a couple of years. Although it was an exciting experiment and some of my students preferred it that way, I reverted back to having a textbook for a couple of reasons. 1) It was tiring having to find and design all the text material for the whole course. With a textbook as back-up, I had the freedom to do both. 2) A few students missed having a tangible object, structured in the linear way that a textbook is. And I can understand that.

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

All sorts of tasks – probably with the exception of the two you mention. Much of the reading of longer texts is done on paper (textbooks or copy hand-outs); but of course, if the students are researching a topic for a written or oral presentation assignment, they will be reading a lot of text on screen. Grammar tasks on the net are good for individual practice, and these tasks give the student immediate feedback. Otherwise, I like to go through grammar and language tasks on paper.

I prefer to use the PC with all sorts of tasks: introducing a topic, showing students short film or news clips to respond to, vocabulary training, quizzes. The visual and audio aspects of digital tools are great.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

Not very often. I have sometimes let the students use Facebook when working on a project; e.g. creating a campaign for renewable energy or human rights... We use YouTube in the classroom frequently, and sometimes students hand in assignments by uploading their multimodal presentations on YouTube.

As a private person, I sometimes use Facebook. I know of Twitter, Snapchat, Instagram, Tumblr, etc., because social media and the media in general are topics that we study for several English courses.

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

We have its learning – and I use it all the time as a tool of communication with the students. I post lesson plans, reminders and a lot of information on the bulletin board of the subject. The students hand in their assignments on its learning, and I correct most of their work digitally. That means that they have all their texts and all my feedback on file; so when I talk

to them about their progress, we can look at their texts again. The students can also go through their own texts before new tests.
Furthermore, I post many links to articles, film clips/trailers, tasks and activities. I also use the rich-page content as a kind of digital class wall-paper.
I rely on its learning so much now that any downtime creates minor crises!

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

The pedagogical pendulum swings back and forth...
There are often students who are distracted by all the fun, extra-curricular things on their laptops; a few may even be addicted. It may be challenging weaning them off of their addiction, and getting them to do schoolwork. But the majority of my students are ambitious and have enough self-discipline to save 'FB' and other stuff for the breaks.
The other challenge is not to forget teaching methods and classroom activities that do not involve computers! I try to include these each term, and find myself nostalgically enthusiastic whenever I remember or come up with such a task. (Drawing, flashcards, paper posters, role play, etc.)

14. Has your employer given any form of education/training when it comes to digital tools?

The school arranged several workshops in those 'early' years (around 2008).
The county has partially subsidized anyone wanting to take the modules in 'Klasseledelse med IKT', etc.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

No, not really. There are no specific requirements regarding how we use digital tools in the classroom. That doesn't mean to say that it will stay that way. It might suddenly become very important again.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Sogn og Fjordane, 3 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 40
2. Please state for which county you work.
Sogn og Fjordane fylkeskommune
3. What kind of education do you have?
Master-English Bachelor-Social studies PPU
4. How long have you practiced as an English-teacher?
9 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

- I use digital tools and the internet more than earlier. All hand-ins and tests are now digital
6. What is your level of skills when it comes to the use of digital tools*?
Average+
 7. What kind of digital tools do you use when teaching English?
Smartboard, Pcs, smartphones, fronter, internet
 8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Positive,
 9. Do you use the textbook as much as before the PC-scheme was introduced?
I try to use the textbook as a guide to what we are to go through, but if the book doesn't cover a theme good enough, I will use the internet as a suplement
 10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
Grammar tasks, finding different information
 11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
Facebook, youtube
 12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
Fronter...hand ins, oral assignments and tests
 13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
Too much time is used on pages they are not supposed to be on....technical problems as connection....printing ...broken pc...documents disappearing
 14. Has your employer given any form of education/training when it comes to digital tools?
Not really
 15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
Not that I know

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female. 43 years old.
2. Please state for which county you work.
Sogn og Fjordane
3. What kind of education do you have?
Lektor med opprykk
4. How long have you practiced as an English-teacher?

December 1997

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
I use the blackboard less and I hold fewer lectures. It is easier and faster for students to find information on the Internet than going to the library.
6. What is your level of skills when it comes to the use of digital tools*?
It is sufficient for my needs, but not as advanced as a Media teacher.
7. What kind of digital tools do you use when teaching English?
Lap top, smart board, video projector, web resources
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
Mostly positive. However, not all students know how to use their sources critically.
9. Do you use the textbook as much as before the PC-scheme was introduced?
It varies, but I still find the textbook very useful. I supplement with digital resources.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (E.g. Grammar tasks, reading tasks etc.)
Digging deeper, finding fast facts, as a dictionary, various language tasks, and so on
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
I hardly ever use social media in the classroom; I prefer Fronter and Skulearena for school purposes. I have a private Facebook account.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
I use Fronter to give messages, to post information about plans, extra material etc. and for tests
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
Pupils losing focus of their work tasks, pupils not bringing their PC/Mac to school when needed, machines in need of repair
14. Has your employer given any form of education/training when it comes to digital tools?
Yes, some basic training how to use Fronter, Skulearena, and the smart boards
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
Expectations of using NDLA and FYR-resources and the tools we have at school plus the digital platforms of the textbooks

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

16. Please state your gender and age.
Female, 32
17. Please state for which county you work.
Sogn og Fjordane fylkeskommune
18. What kind of education do you have?
Master I nordisk språk og litteratur, mellomdag engelsk, årsstudium musikk
19. How long have you practiced as an English-teacher?
4 years
20. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
Have always used computer
21. What is your level of skills when it comes to the use of digital tools*?
Excellent
22. What kind of digital tools do you use when teaching English?
PC, smartphone (kahoot), , the textbook's internet resources, learning-platforms, NDLA
23. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
Positive
24. Do you use the textbook as much as before the PC-scheme was introduced?
Yes
25. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
Grammar, listening while reading,
26. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
No
27. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
- Publish documents for them to read
 - Post messages
 - Publish plans
 - They hand in tests there

28. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

The pupils are often busy with social media while I teach (they do not always listen)

29. Has your employer given any form of education/training when it comes to digital tools?

No

30. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Not specifically as an English teacher, no.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Sør-Trøndelag, 3 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

I am 62 years old and work as a counsellor and a teacher of German and English.

2. Please state for which county you work.

Sør-Trøndelag fylkeskommune

3. What kind of education do you have?

I have a master in English literature, 1 ½ years of German from the university, 1 year of social studies(samfunnskunnskap), 1 year of media and 1 year of Counselling – all taken at NTNU in Trondheim.

4. How long have you practiced as an English-teacher?

For 37 years!!!

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

Yes, there is quite a difference. Earlier we mainly used the textbooks, NRK-programs for English and German and listening comprehensions from cd-s. Today I still use textbooks, but I also use Youtube to play music, songs, short videos. I use the websites of the textbooks to let my pupils hear native speakers, to practise grammar with immediate response(glosetrener f.eks.). Google can be used to find information in connection with in-depth work, lectures in class etc., and Google pictures can be used for the same purpose. Lately I have started using Kahoot to make a quiz to test how much they remember about material we have been dealing with.

6. What is your level of skills when it comes to the use of digital tools*

You learn as long as you have pupils and students and I attend all courses offered to us to keep up.

7. What kind of digital tools do you use when teaching English?

I use powerpoint, the websites of textbooks, google and google pictures, youtube and kahoot.

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

It is hard to fight the wrong use of the pc for checking facebook etc. but there is no way we can go back to a classroom without pcs. However, as a teacher you still have to be the boss of the classroom and decide when and for what purpose the computer is to be used.

9. Do you use the textbook as much as before the PC-scheme was introduced?

I still use it but needless to say – with all the other tempting computer programs and options, less time is spent on the book.

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

Grammar tasks, listening to native speakers/listening comprehensions, finding information.

11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)

No, I don't.

12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

We use Itslearning. I use it for questions or other tasks I want them to answer for the next lesson, for tests. I use the calendar to state what their homework for next time is. As a counsellor I have my own room where I give them relevant information from my field.

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

To try to keep them online for the subject I am teaching and not on facebook and twitter.

14. Has your employer given any form of education/training when it comes to digital tools?

Yes. We have courses at school where my digitally active teachers teach those of us who are not quite up to it.

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Yes, our leaders want us to be up-to-date!

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. F, 53
2. Please state for which county you work. Sør-Trøndelag
3. What kind of education do you have? University, adjunkt m tillegg
4. How long have you practiced as an English-teacher? 26 years

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

I use short film-clips as illustration of various points (grammar, novel excerpts, geography, culture, pronunciation)

Plans and tasks are made available on It's Learning

I ask the students to find background information about certain topics before reading a text or watching a film, e.g. historical events, a city or country. Before the PC-scheme was introduced, this took too much time, so I provided the information instead.

Grammar practice: Both the old way and PC (NDLA Grammar Self Assessment is very useful)

Some classes have digital textbooks (Skills smartbook). Advantages: The students may listen to the text when they read it at home, and they may take notes and write comments in the textbook. Disadvantage: Occasional technical problems.

6. What is your level of skills when it comes to the use of digital tools*? Ok
7. What kind of digital tools do you use when teaching English? See question 5
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? Positive (see q 5), or I wouldn't use it.
9. Do you use the textbook as much as before the PC-scheme was introduced? Almost.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) Grammar, interactive language tasks, writing.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)None. I am familiar with fb as a private person.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? Plans, homework, written assignments, links to dictionaries, BBC, etc.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? Sometimes technological problems (always have a plan B), distraction – students using the pc for the wrong things (fb, games, fashion websites etc)
14. Has your employer given any form of education/training when it comes to digital tools? More than 20 years ago. Some courses have been offered over the years within various subjects.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? We are expected to keep up to date, but are free to choose our own methods, as long as we stick to the curriculum.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

Female, 46 years old

2. Please state for which county you work.
Sør – Trøndelag Fylkeskommune
3. What kind of education do you have?
“Mellomfag” from the University of Trondheim.
4. How long have you practiced as an English-teacher?
21 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
The most striking difference is the possibilities of variation that you have. Earlier the primary focus was on the textbook and the tasks at hand there. Now you can choose from any number of sites and pages – youtube, ndla, sites relates to the textbook etc., interactive tasks, video clips and so on. I think I vary my teaching/lessons to a much greater extent than before. On the other hand I think there is less time to go in depth of topics – I spent more time on grammar exercises before – and going through them afterwards.
6. What is your level of skills when it comes to the use of digital tools*?
Quite good I think – I use the PC every lesson, interactive tools/tasks, different sites on the Internet, Its learning – posting facts and information. Students hand in all their work on Its learning etc.
7. What kind of digital tools do you use when teaching English?
See 6
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
Mostly positive – see 5. I think it is a must for today’s students – they expect to be entertained....
9. Do you use the textbook as much as before the PC-scheme was introduced? No, definitely not.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) Mostly for for gathering information, for interactive tasks (with immediate feedback) and for handing in written work.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) No, not in the English classroom. Privately I have facebook, twitter, Instagram and snapchat.
12. If your school uses a learning platform, (ex. Fronter, It’s Learning), how do you use this in your English teaching? Mentioned before –information, handing in work, grades/evaluation, half term schedules etc
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? Catching the student’s attention...
14. Has your employer given any form of education/training when it comes to digital tools?
Yes – I have attended different types of courses and training schemes.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? Expect us to make the teaching best suited for the students – with or without digital tools. What is best for the individual.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Telemark, 3 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
gender: f, age: 52
2. Please state for which county you work.
Telemark Fylkeskommune
3. What kind of education do you have?
5+ years of higher education in English and French
4. How long have you practiced as an English-teacher?
7 years in upper-secondary education
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
Yes, definitely. I was a teacher for 7 years in the beginning 90's, then had a different job until 2011. Started teaching in vgo again in 2011 (English, French, German). ICT and the internet have changed learning and teaching completely. Very positive!
6. What is your level of skills when it comes to the use of digital tools*?
Use it and love it!
7. What kind of digital tools do you use when teaching English?
PC every lesson, Ipad, ebok ("brettbok", just testing this school year), programs and websites – Word, ppt, prezi, ndla, TED, ISLCollective, WordCloud, and many more Am just looking into "flipped classroom"
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
no doubt positive!
9. Do you use the textbook as much as before the PC-scheme was introduced?
No, I hardly use a textbook
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
For myself or for my students? Online texts, news (text and video), textbook websites, grammar websites (for the students to choose themselves), research tasks and projects for students, presentation tools, ... all skills!
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
Some of my classes have a fb page
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?

TFK uses fronter, which is not a valuable contribution as an online learning platform. Used mainly for administration (messages, handing in papers, etc)

13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?

Planning lessons in a different way; focus even more on students' learning and activities; a positive challenge: how to allow more student autonomy (e.g. choosing content or working methods)

14. Has your employer given any form of education/training when it comes to digital tools?

Yes, small workshops during planning days

15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?

Yes

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.

2. Male 62

3. Please state for which county you work.

4. Norway (Telemark)

5. What kind of education do you have?

6. College England- Høyskole Norway

7. How long have you practiced as an English-teacher?

8. 20 years

9. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.

10. Yes, more nett, more presentations(prezi), all students have own pc

11. What is your level of skills when it comes to the use of digital tools*?

12. Quite good many courses, also very interested in the use of pc

13. What kind of digital tools do you use when teaching English?

14. Everything possible

15. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?

16. both

17. Do you use the textbook as much as before the PC-scheme was introduced?

18. Not at all

19. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)

20. Everything there is no limit

21. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
22. Facebook twitter
23. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
24. Fronter, for everything that is to be handed in (tests.homework etc)
25. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
26. Stop private use of facebook in the classroom
27. Has your employer given any form of education/training when it comes to digital tools?
28. yes
29. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
30. yes

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
Female, 53
2. Please state for which county you work.

Telemark
3. What kind of education do you have?
a. Master sports, mellomfag engelsk, historie gr fag= lektor 1
4. How long have you practiced as an English-teacher?
a. 26 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
a. Of course you use the computer more both when writing and in finding/using sources, but much of the things I do is not so different except for the use of computers. Quizzes like kahoot are of course a welcomed addition + the use of Fronter as a tool for delivering and controlling homework/tests
6. What is your level of skills when it comes to the use of digital tools*?
a. Average
7. What kind of digital tools do you use when teaching English?
a. Smart board, computer and at times smart phone, Fronter, text book digital version, You tube

8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
 - a. Both – I find that the “old” way may be just as successful as PC scheme because the use of Pc makes distractions easier for the students
9. Do you use the textbook as much as before the PC-scheme was introduced?
 - a. No
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
 - a. A little bit of everything, I try to vary. NDLA has a lot of good tasks/texts etc which I use in addition to the digital exercises to our textbook
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
 - a. You tube mostly with the students. Facebook privately, but I find working with that as part of English has not been very succcful so far
12. If your school uses a learning platform, (ex. Fronter, It’s Learning), how do you use this in your English teaching?
 - a. Mostly for hand ins and tests + info to the students about test, homework and other necessary messages
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
 - a. How to keep students focused on the task, not facebook and other things they find more interesting
14. Has your employer given any form of education/training when it comes to digital tools?
 - a. Very little
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
 - a. They expect we use them, but there are no direct guidelines which I am aware of

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook’s internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Troms, 2 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Female, 33**
2. Please state for which county you work. **Troms fylke**
3. What kind of education do you have? **Master’s degree in English, Bachelor’s degree in German and Political Science. PPU**
4. How long have you practiced as an English-teacher? **8 years**

5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **The PC-scheme was introduced when I started working as a teacher. Thus, nothing has changed in terms of equipment. However, with the increased knowledge students now have, I feel the need to increase my own knowledge to keep updated. In addition, I try to adjust to meet the interests of the students and be creative. Nevertheless, there are challenges with the PC-scheme, especially in terms of keeping the students focused in lessons and avoiding cheating. This has made me start using written tests now and then. The problem with that is to interpret their writing, because they are not used to writing by hand any more.**
6. What is your level of skills when it comes to the use of digital tools*? **I wish I had more knowledge on the use of digital tools, or at least more time to explore and learn about it. I do use PC, iPad, smartphone with apps, the textbook's internet resources, learning platforms, e-books, social media etc.**
7. What kind of digital tools do you use when teaching English? **PC, films, internet resources(like Kahoot, Quizlet, Glosemesteren, the textbook resources), smartphones.**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **Mostly negative(see comments on question 5)**
9. Do you use the textbook as much as before the PC-scheme was introduced? **See question 5**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **Reading updated information, student research on specific topics, grammar tasks(interactive), writing tasks, vocabulary training, videos representing information about certain topics, music**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **Social media is part of the competence aims in one of my subjects. Therefore, it has a natural place in the education. I use Facebook, Twitter, Pinterest, Instagram.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **For handing in assignments, posting lesson plans, week plans, written tasks, giving feedback on assignments(oral or written), questionnaires for the students.**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **See answer on question 5 and 6**
14. Has your employer given any form of education/training when it comes to digital tools? **No, unfortunately not.**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **I feel a pressure in terms of keeping updated, but there are no resources used on seminars and courses to increase our competence.**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
 - a. Male, 31
2. Please state for which county you work.
 - a. Troms
3. What kind of education do you have?
 - a. Master's degree in English Literature
4. How long have you practiced as an English-teacher?
 - a. Four years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
 - a. I have never worked as a teacher before the PC-scheme was introduced. I still limit the use of a PC when it becomes too much of a distraction for the students.
6. What is your level of skills when it comes to the use of digital tools*?
 - a. I would say that I have a high skill-level.
7. What kind of digital tools do you use when teaching English?
 - a. The PC is the most common tool. Smartphones are used for filmmaking and sometimes voice recording, replacing the language lab. I also use MS Publisher, Audacity, MS Office, and MS Moviemaker.
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
 - a. That depends on how much of a distraction it is. Limited access to the internet helps. I also think there is a lack of focus on study techniques in lower secondary school and below.
9. Do you use the textbook as much as before the PC-scheme was introduced?
 - a. Yes, as a source of literature. Tasks are also taken from the textbook. In addition, we work in a team to produce our own material.
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
 - a. Grammar, writing tasks, peer evaluation. I try to avoid reading exercises on a PC because I think it is painful to read on a screen.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
 - a. I do not use social media in the classroom, we try to only focus on Fronter. The students communicate on Facebook (for school-related topics.) They have a class-group.
 - b. I am familiar with and use Facebook, Twitter, Instagram, Snapchat
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
 - a. Fronter is used for organising the work schedule, handing out homework, conducting quizzes, information, handing in tests, receiving feedback.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
 - a. Competing with the internet for attention is the biggest challenge. Also, the fact that every student is considered proficient in English based on their ability to use and

communicate in English online. This is a limited proficiency and it is sometimes hard to convey that to students and their parents.

14. Has your employer given any form of education/training when it comes to digital tools?
 - a. In my practice as a PPU-student, I was given an introduction to a GPS-game of which the name I have since forgotten.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
 - a. I guess. It is a curricular aim and focus area, but nothing out of the ordinary has been stated.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Vest-Agder, 3 interviews:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age.
 - a. F 42
2. Please state for which county you work.
 - a. Vest Agder Fylkeskommune
3. What kind of education do you have?
 - a. Master + extra education
4. How long have you practiced as an English-teacher?
 - a. 12 years
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain.
 - a. Before I was more "book-oriented". Now my students are able to find information from various sources and with different perspectives. This is a strength in the way I teach English. I am now more capable of differentiating my teaching with less resources needed. I also use video lectures as well as giving the students homework submitted through video.
6. What is your level of skills when it comes to the use of digital tools*?
 - a. Experienced user
7. What kind of digital tools do you use when teaching English?
 - a. Computers, video, mobile phones, cameras, internet, online software (open source)+
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher?
 - a. For my work it has been a very positive contribution(!)
9. Do you use the textbook as much as before the PC-scheme was introduced?
 - a. Definitely not

10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.)
 - a. All tasks are applicable.
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.)
 - a. Yes, I use social media in the classroom. Particularly Facebook but also It's Learning.
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching?
 - a. We use It's Learning mostly for submissions and for information about the lessons and plans.
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme?
 - a. Students use computers for non-related purposes too much.
14. Has your employer given any form of education/training when it comes to digital tools?
 - a. For students or teachers?
 - b. There are training classes for teachers but I have never participated in these, as they are for beginners only.
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools?
 - a. No particular expectations but it is kind of expected that we use digital tools

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Female 61**
2. Please state for which county you work. **Vest-Agder**
3. What kind of education do you have? **Adjunkt med tilleggsutdanning + mer.**
4. How long have you practiced as an English-teacher? **35 years**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **Very much so. The PC gives me a good opportunity to vary the education much more than I could before. We can find interesting information/news at once and very quickly.**
6. What is your level of skills when it comes to the use of digital tools*? **Average.**
7. What kind of digital tools do you use when teaching English? **PC, Internet, multimodal texts, learning-platforms, different computer programs.**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **I think it has been very positive.**

9. Do you use the textbook as much as before the PC-scheme was introduced? **Not at all. Sometimes I "forget" that I have a textbook. Very important when it comes to vocational texts that we don't find in the textbooks anymore.**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **Films (DVD) with tasks, interactive grammar tasks, find information, news, e.g. You tube, google, NDLA**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **I don't use any social media myself, although I know about them.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **Give information, texts, tasks, tests, communication.**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **Some of the students don't use the PC as expected, and I think the results are sometimes lower than they would have been if they hadn't all got their own PC.**
14. Has your employer given any form of education/training when it comes to digital tools? **Yes, we get information about new programmes and other important news.**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **We have to use digital tools, I can't see that it is possible to work as a teacher without doing so. The PC is our main teaching tool today.**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Male, age 34**
2. Please state for which county you work. **Norway (Vest Agder)**
3. What kind of education do you have? **Cand mag, philol (English 110stp, Nordic 60 stp, German 60 stp, History 90 stp, PPU 60 stp) University of Agder 2007**
4. How long have you practiced as an English-teacher? **Started in 2001, employed on a regular basis for Vest-Agder Fylkeskommune in 2007**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **The pupils are more motivated now. It's easier to get information, and we use many videos. I mainly teach Vocational classes (BA, TIP, SS and EL), and the computer makes it easier for the pupils to read and write. Before it was difficult to read texts and understand what they meant. We spend many lessons working with practical situations, and the examples we use, are found on different websites.**
6. What is your level of skills when it comes to the use of digital tools*? **I consider myself to be quite skilled. I use many different tools in my classroom such as PC, SmartBoard, SmartBook, iPad, and Mobile phone. I try to pick up some new techniques and methods each year.**

7. What kind of digital tools do you use when teaching English? **Digital textbook from NDLA, Smarboard and PC.**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **Mainly positive, but it's harder for the pupils to focus on the subject. Sometimes we have to limit the use of social media and internet.**
9. Do you use the textbook as much as before the PC-scheme was introduced? **I use the internet more now than before, but a good textbook is always handy. The reason why I use NDLA this year, is because the textbook provided by the school is old and not meant for my pupils (Gateways).**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **I prefer the interactive tasks, and I use the PC mainly as a writing tool when the pupils have to write. They answer some tasks after reading the text. Often they also write a short summary of the text. For grammar tasks we mainly solve the ones where you get a solution right away after trying.**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **I'm familiar with most of them, but in the classroom we mainly use Facebook for messages and communication as an addition to It's Learning.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **We use It's Learning, and I try to use it as actively as I can. I mainly use it for lesson planning and written tasks from the pupils. I have been an administrator, so I try to expand my use of the LMS.**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **The students are not as focused on what we are working with in the classroom as they used to. But they are more positive and not as bored as they used to be. It's also easier for them to write texts and understand what we are working with. The greatest challenge is "Google translate" when they write texts in Norwegian instead of in English.**
14. Has your employer given any form of education/training when it comes to digital tools? **Very little training and education. They mainly think we should manage on our own. They think it's nice for us to be creative, but we are not introduced to new technology on a regular basis. When new technology, such as SmartBoards, are introduced we are expected to handle them without training. New technology is for those who are interested, and not for everyone.**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **Not much, but we are expected to use the platforms used by the school such as It's learning and Skolearena. It is considered to be positive if we use digital technology in the classroom, but we don't have to. Some of my colleagues are still stuck in the 90s. The pupils are always positive to new technology in the classroom.**

Good luck on your master. I look forward to reading it.

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Vestfold, 1 interview:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1. Please state your gender and age. **Female. 50 years old**
2. Please state for which county you work. **Norway Vestfold**
3. What kind of education do you have? **Bachelor of Science in Microbiology. Bachelor of Veterinary Science. Teacher training degree. English degree.**
4. How long have you practiced as an English-teacher? **2 years**
5. Is there a difference in how you teach English now, compared to before the PC-scheme was introduced? Please explain. **I am only familiar with the PC-scheme.**
6. What is your level of skills when it comes to the use of digital tools*? **Average / below average compared to my students!**
7. What kind of digital tools do you use when teaching English? **PC, the textbook's internet resources, learning-platforms, social media, and different computer programs.**
8. Do you think the PC-scheme has been a negative, or positive, contribution to your work as an English-teacher? **Positive, because there are so many arenas which stimulate the student's mind. Teenagers love digital technology. Negative, as there is a tendency to be distracted by social network sites. Negative... students are not tolerant enough to spend time reading a novel (they would rather watch the film version)**
9. Do you use the textbook as much as before the PC-scheme was introduced? **I have only been teaching English for 2 years, so I can't comment.**
10. If you choose to use the PC instead of the textbook, which tasks do you prefer to use the PC for? (e.g. Grammar tasks, reading tasks etc.) **Listening tasks (texts read in regional dialects etc), Films. Interactive tasks with control questions related to the text in the textbook, grammar tasks.**
11. Do you use social media in the English classroom? Which one(s)? If not, what kind of social media are you familiar with, and use, or have used as a private person? (e.g. Facebook, Twitter etc.) **No. I do not use them privately or in the classroom.**
12. If your school uses a learning platform, (ex. Fronter, It's Learning), how do you use this in your English teaching? **I give messages to the class about lessons and homework. Assignments are sent digitally. Feedback is given via Its Learning and orally.**
13. What kind of challenges have you as an English-teacher met after the introduction of the PC-scheme? **Keeping the student's focus in the classroom and to designated tasks, and away from social network sites.**
14. Has your employer given any form of education/training when it comes to digital tools? **Yes, on a regular basis. I find this can be confusing and like to stick to a few areas. I have tried one-note for example. "It is better to be a master of a few things than a Jack of all Trades!"**
15. Does your employer have any expectations to you as an English-teacher when it comes to use of digital tools? **No. All teachers at the school must use Its learning for messages, assignments etc, but otherwise we are allowed to teach as we will.**

*Digital tools: PC, iPad or other boards, smartphones and applications, the textbook's internet resources, learning-platforms, multimodal texts, e-books, social media, different computer programs etc. Please feel free to add tools in your answer that are not mentioned here.

Østfold, 1 interview:

Digital interview.

Please answer the questions as thoroughly as possible. Thank you.

1	Gender/age	Woman 63
2	County	Østfold
3	Education	To Bachelors and a Master
4	Practice	40 years
5	Methods	I give the students more exploratory work, I collect more exercises that I need to check. Less grammar, otherwise I use myself and my knowledge, as before
6	Level of digital skills	I have a fair knowledge of, and make regular use of: PC , the textbook's internet resources, learning-platforms, multimodal texts, different computer programs.
7	Digital tools in class:	I use the above regularly: The textbook's internet resources, learning-platforms, multimodal texts, different computer programs. My age has made me reluctant to make use of the more recent ways of communication, and I don't approve of social media. Mail/SMS is sufficient for me, and I'm afraid it may be misused by my students.
8	PC-scheme: A negative, or positive contribution	The negative factor in my teaching is that I've lost the students' attention to a great degree. Positive: The computer makes it easier to learn for the kids who want to. They are exposed to English in a way the textbook and I cannot do.
9	Use of the textbook	I use the textbook less. Still, I find that many students simply need to hold on to something concrete, and many beg me leave to use pen and paper.
10	The PC instead of the textbook	The tasks I use the PC for are grammar tasks, reading tasks, exercises and creating texts, but most often for group work and for gathering information.
11	Social media	I do not use social media because I don't think they are of use.
12	Learning platforms	I use Fronter, mainly for the handing in of products, and of course to give individual evaluation.

13	Challenges of PC-system:	As earlier: The loss of the students' attention, and the increased possibility of cheating.
14	Digital training in the workplace	We have been given courses, but not sufficient for my needs as an old teacher. Courses are mostly about pedagogical mysteries that I solved 30 years ago 😊
15	Expectations from management	It is difficult to say something specific about English. They expect us to use the system in all subjects.